Universidad Autónoma de Baja California

INSTITUTO DE INGENIERÍA

Oficio No. 0403/2015-1

UNIVERSIDAD AUTONOMA DE BAJA CALIFORNIA RECIBIDO 28 ABR 2015 SECRETARIA DE RECTORIA E IMAGEN INSTITUCIONAL

DR. JUAN MANUEL OCEGUEDA HERNÁNDEZ
RECTOR DE LA UABC
EDIFICIO DE RECTORÍA
P R E S E N T E

Por este medio y con base en el Artículo 5 del Reglamento del Reconocimiento al Mérito Universitario, someto a su amable consideración las propuestas que fueron analizadas por el Consejo Técnico de Investigación del Instituto de Ingeniería en reunión celebrada el día 24 de abril del 2015, para su evaluación por la Comisión de Honor y Justicia del Honorable Consejo Universitario, que Usted dignamente preside:

a) Asignación al Laboratorio de Sistemas Térmicos y Eléctricos del nombre: Laboratorio de Sistemas Térmicos y Eléctricos "Dr. Héctor Enrique Campbell Ramírez".

b) Otorgamiento de Dr. Honoris Causa para al Ing. Nelson Cheng.

Se anexa documentación correspondiente a cada una de las propuestas.

Sin otro particular agradezco la atención que se sirva dar al presente, reiterándole mi más atenta y distinguida consideración.

UNIVERSIDAD AUTONOMA DE BAJA CALIFORNIA INSTITUTO DE INGENIERIA

A T E N T A M E N T E
Mexicali, B. C., 27 de abril del 2015
POR LA REALIZACIÓN PLENA DEL HOMBRE

DRA. GISELA MONTERO ALPÍREZ
DIRECTORA

C. c. p. Archivo
C. c. p. Minutario
GMA/nrs

UNIVERSIDAD AUTONOMA DE BAJA CALIFORNIA DESPACHADO 27 ABR 2015 INSTITUTO DE INGENIERIA

Universidad Autónoma de Baja California

INSTITUTO DE INGENIERÍA

ACTA DE CONSEJO TÉCNICO DE INVESTIGACIÓN

Siendo las 10:00 horas del día 24 de abril, del año en curso, se reunió en la dirección del Instituto de Ingeniería, el Consejo Técnico de Investigación de esta unidad académica, a fin de celebrar sesión ordinaria bajo el siguiente:

ORDEN DEL DÍA

1. Lista de asistencia, verificación y en su caso, declaración del quórum legal.
2. Análisis y en su caso aprobación de la propuesta para que el Laboratorio de Sistemas Térmicos y Eléctricos del Instituto de Ingeniería lleve el nombre de "Dr. Héctor Enrique Campbell Ramírez".
3. Propuesta de otorgamiento de Doctor Honoris Causa al Ing. Nelson Cheng.
4. Clausura de la sesión

Al dar inicio la sesión se pasó lista de presentes, declarándose quorum legal, al estar presentes todos los consejeros propietarios. Acto seguido, la presidenta del consejo dio lectura al orden del día, el cual fue aprobado por unanimidad.

Para el desahogo del segundo punto del orden del día, se analizó la propuesta para que el Laboratorio de Sistemas Térmicos y Eléctricos del Instituto de Ingeniería lleve el nombre de Laboratorio de Sistemas Térmicos y Eléctricos "Dr. Héctor Enrique Campbell Ramírez", resultando aprobada por unanimidad.

En el tercer punto del orden del día, se presentó la propuesta de otorgamiento de Doctor Honoris Causa al Ing. Nelson Cheng, dando a conocer su trayectoria, contribución a la sociedad y su relación con la Universidad Autónoma de Baja California. Una vez analizada la propuesta, los integrantes del consejo acordaron aprobarla por unanimidad.

Finalmente siendo las 11:00 horas del día citado al inicio de la presente, se dio por concluida la sesión, levantándose como constancia, la presente acta, la cual firman los que en ella intervinieron. Se anexa a la presente la lista de asistencia.

A T E N T A M E N T E
"POR LA REALIZACIÓN PLENA DEL HOMBRE"
Mexicali, Baja California a 24 de abril de 2015.

UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA

SECRETARIO:

DR. MOISÉS RIVAS LÓPEZ

PRESIDENTE:

DRA. GISELA MONTERO ALPÍREZ

INSTITUTO DE INGENIERIA

Universidad Autónoma de Baja California

INSTITUTO DE INGENIERÍA

INTEGRANTES DE H. CONSEJO TÉCNICO DE INVESTIGACIÓN

LISTA DE ASISTENCIA

Mexicali, Baja California, 24 de abril del 2015

PROPIETARIOS	SUPLENTES
DRA. SARA OJEDA BENÍTEZ	DRA. GUADALUPE LYDIA ÁLVAREZ CAMACHO
DR. MOISÉS RIVAS LÓPEZ	DR. HÉCTOR ENRIQUE CAMPBELL RAMÍREZ
DR. JORGE RAMÍREZ HERNÁNDEZ	DRA. M. SOCORRO ROMERO HERNÁNDEZ
DR. ONOFRE RAFAEL GARCÍA CUETO	DR. NÉSTOR SANTILLÁN SOTO

PRESIDENTE:	SUPLENTE:
DRA. GISELA MONTERO ALPÍREZ	**DR. RAFAEL VILLA ANGULO**

Semblanza del Ing. Nelson Cheng

El Ing. Nelson Cheng, es un reconocido inventor de prestigio internacional en el campo de las especialidades químicas para la preservación de materiales y la salud. Nació en Singapur en el año de 1956 y pertenece a la generación que logró la transición de ese país a ser el más eficiente de Asia y ocupar un lugar primer mundo. Estudió y se graduó como Ingeniero Marino en el Departamento de Producción Primaria de Singapur y se desempeñó desde 1976 como cadete de ingeniería, durante sus estudios profesionales en la empresa Overseas Shipping Corporation. Posteriormente de 1978 a 1990, fue supervisor técnico de campo, ingeniero químico de ventas y gerente en APS, Aria International y Active Chemical Industry.

En 1990 funda el grupo de empresas Magna con sede en Singapur y del cual es hasta la fecha Presidente, logrando expandirlo a varios países de Asia, así como también a Australia, Canadá, Estados Unidos y México. Grupo Magna es uno de los líderes a nivel mundial en los campos especializados de tecnología para la prevención de la corrosión, lubricantes de última generación y surfactantes limpiadores.

El Ing. Nelson Cheng es el inventor líder con más patentes del Departamento de la Propiedad Intelectual de Singapur, ha inventado más de 500 productos químicos, aparatos y equipos, de los cuales más de 200 están listados en la referencia cruzada de la OTAN. Nelson ha mantenido siempre una línea verde en sus actividades de investigación y desarrollo logrando que dichas invenciones sean ambientalmente amigables. Entre sus contribuciones más importantes a la ciencia y tecnología química destacan sus investigaciones y desarrollos en inhibidores de corrosión de fase vapor, tecnología de última generación de lubricantes activados por calor con la cual está revolucionando la industria de los lubricantes a nivel internacional, tecnología de reacciones moleculares de superficie, tecnología avanzada de coloides para la protección de infraestructura contra la corrosión, bacilos químicos enzimáticos y el desinfectante Legionella-X que fue utilizado con una eficiencia total para combatir el H5N5 y Legionela pneumofila en Asia. Actualmente su trabajo de investigación está enfocado en nanotecnología y tecnología de fusión para lubricación.

En febrero de 2003 se presentó el síndrome severo de respiración aguda (SARS) y sabiendo que el tiempo para combatir su expansión era limitado el Ing. Cheng pasó semanas en su laboratorio investigando sobre desinfectantes de alta eficiencia logrando desarrollar el producto Legionella-X que luego donó en grandes cantidades para hogares necesitados en Asia e Indonesia. Así como también se involucró como entrenador para la descontaminación de equipo militar durante esta epidemia. También durante el Tsunami de 2004 donó miles de botellas de su producto para sanitizar y proteger a la gente en lugares sin agua corriente. El producto ha sido también utilizado para combatir la influenza aviar H5N5 y el Dengue en Asia.

Las excepcionales contribuciones del Ing. Cheng para el cuidado de la salud en Asia han complementado los esfuerzos y logros en sus campos de especialidad: el control de la corrosión y la lubricación. Por ello ha sido invitado en numerosas ocasiones a compartir sus experiencias y motivación con expertos de la industria y con académicos y estudiantes.

Es así que nace su colaboración con la Universidad Autónoma de Baja California, a través de información de congresos y con la ayuda de Magna Canadá, detecta al grupo de investigación en corrosión del Instituto de Ingeniería y en 2002 hace un primer contacto para fortalecer a dicho grupo, proveyendo recursos, capacitación y el respaldo, para que los productos para el control de corrosión fabricados por Magna y sus clientes en América, fuesen liberados al mercado después de la evaluación realizada en el Laboratorio de Corrosión y Materiales "M.C. José Antonio Sampedro" del II-UABC. Ello permitió que nuestro laboratorio trascendiera a nivel internacional y que a la fecha cuente con metodologías para la evaluación de inhibidores de corrosión propias, avaladas y registradas en las listas de la OTAN. En el transcurso de 13 años Nelson Cheng ha apoyado con becas a estudiantes e investigadores de UABC, para realizar estancias en sus laboratorios en Singapur y para cubrir necesidades como compra de materiales, equipos y reactivos. De la colaboración con los académicos del II han surgido además de metodologías de análisis, publicaciones, reportes técnicos, tesis de licenciatura y posgrado, así como algunas propuestas de patente que están en proceso.

Recientemente, en 2014, financió el equipamiento de la primera etapa de un laboratorio de Tribología en el II-UABC mismo que será único en su tipo y estará dedicado al estudio y caracterización fisicoquímica de la tecnología lubricantes de calor activado y fusión, que actualmente marca el conocimiento de frontera en el tema. Durante su discurso de inauguración y entrevistas ante los medios de UABC expresó su interés en nuestra universidad y su compromiso por seguir impulsando la calidad de la investigación y los programas educativos. De manera complementaria estableció un presupuesto semilla de 5000 USD para su funcionamiento y becas para dos estudiantes en UABC, además de estancias para estudiantes de UABC en Singapur con todos los gastos cubiertos por la Fundación de Magna Group. Como parte del fortalecimiento del departamento de investigación y desarrollo de Magna Group, Nelson Cheng promovió que su personal especializado en corrosión se forme en el Programa de Maestría y Doctorado de la UABC, así como también que en el II-UABC, se dé el entrenamiento en ingeniería de corrosión a los clientes internacionales que son

usuarios de los productos desarrollados por Magna para la prevención y control de la corrosión. Aunado a lo anterior, los nuevos desarrollos de formulaciones y metodologías de evaluación de lubricantes y aditivos para lubricación, serán compartidos en su registro de propiedad intelectual de acuerdo al grado de colaboración del personal de UABC, impulsando con ello la capacidad innovadora de nuestra universidad. Con ello se consolida una parte importante de la vinculación académica a nivel internacional.

Cabe mencionar también que se recibieron cartas de apoyo a la postulación del Ing. Nelson Cheng como posible receptor del Doctorado Honoris Causa, que provienen de universidades y empresas de Corea, Indonesia, Singapur, Canadá y Estados Unidos.

En síntesis, consideramos que la colaboración con el Ing. Nelson Cheng ha sido un claro ejemplo de la vinculación efectiva y la innovación de la UABC con empresas internacionales que impacta positivamente a la sociedad Mexicana. Consideramos también que la trayectoria como inventor y desarrollador de tecnología y sus contribuciones en beneficio a la salud de la humanidad hacen a Nelson Cheng merecedor a recibir el reconocimiento Doctor Honoris Causa por la UABC.

Milestone Achievements-Inventor of Lupromax EA engine oil additive that has entered the Indonesia World Record Museum for running a car and motorcycle without any lubricant for 280 kilo meters and 8 hours after treatment with said additive. *(see attached certificate from Indonesia World Record Museum).* 67-68

Inventor of Legionella-X that deactivates 100% of H5N1 Avian Flu Virus 69-72

Vappro VCI preservation procedure for military equipment has been endorsed and accepted by the Singapore Armed Forces, Taiwan Armed Forces, Malaysia Armed Forces and UAE Armed Forces. *(see newsletters)* 73-84

Inventor of Legionella-X Hospital Grade Disinfectant that kills 99.99992 percent of Legionella pneumophila bacteria. *(see attached PSB Test Report).* 85

Inventor of Hospital Grade Disinfectants that passed the U.K. Kelsey Skyes Test. *(see attached test reports).* 86-91

Inventor of USDA (United States of Department of Agriculture) Certified Bio-lubricant. 92-94

Inventor of Vappro 826 biodegradable VCI plastic film that won the Singapore Star and World Star Packaging Award *(see attached newsletter and Award Certificates).* 95-118

Summary of Curriculum Vitae

- Founder, CEO, & Inventor of Magna Group of Companies.
- Singapore's Leading Inventor acclaimed by the national newspapers and news media of Singapore- (The Straits Times, Today Newspaper, AsiaOne, Asia News).
- Recognized as the Singaporean with the most patents registered with the Intellectual Property of Singapore (IPOS).
- 2008 Singapore Top 7 Patents Filers.
- Acclaimed by Major Newspapers in Indonesia as the Inventor of Legionella-X Disinfectant that Deactivates 100% of H5N1 Avian Flu Virus.
- Inventor of Hospital Grade Disinfectants with a Killing Efficacy of 99.99992% against Legionella pnuemophila, Escherichia coli, Proteus vulgaris, Pseudomonas aeruginosa, and Staphylococcus aureus.
- Inventor of Lupromax that sets a World Record in the Indonesia World Record Museum for Running a car and motorcycle for more than 8 hours and travelled a distance of more than 280km without lubricant after treatment with Lurpomax.
- Environmental Innovator for Biolubri Lubricants and Biodiesel Based products Certified by United States of Department of Agriculture (USDA).
- 2014 Top Entrepreneur- Small Medium Business Association.
- Winner of the Asia Excellence Award 2014.
- Winner of the World Star Packaging Award 2014
- Winner of Singapore Star Packaging Award 2014
- Winner of Top 20 Outstanding Achievement Award-Innovation 2013
- Top Business Luminary Promising SME 500 2013
- Winner of the Promising SME 500 2012
- 2010 Awarded The Industrial Training Programme Participation Award (Singapore Polytechnic).
- Author of 20 Published Preservation Manuals listed in NATO MCRL (Master Cross Reference list) with NATO STOCK NO. assigned to each manual.

Curriculum Vitae

CONTACT INFORMATION

Name: Cheng Kit Yew
Christian name: Nelson Cheng
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Office Telephone: +65-67862631
Office Fax: +65-67851497
Cell Phone: +65-96620067
Email: nelsoncheng@magnachem.com.sg

PERSONAL INFORMATION

Date of Birth: 27/07/1956
Place of Birth: Singapore
Citizenship: Singaporean
Gender: Male
Marital Status: Married

EMPLOYMENT & WORK HISTORY

Overseas Shipping Corporation 1976-1977

Cadet Engineer

Maintenance of engines on board ocean going vessel.

APS Pte Ltd 1977-1982

Field Technical Supervisor

Manage and provide technical training to a team of field technicians, helping field technicians to solve technical problems encountered in electro-mechanical machines.

Aria International Pte Ltd 1982-1983

Chemical Sales Engineer

Sales of water treatment chemicals to marine and industrial sectors, providing after sale service to said industries.

Sales Manager

Managing a team of sales engineers to ensure sales target is achieved, provide sales and product training to sales team.

Active Chemical Industry Pte Ltd 1983-1990

Export Sales Manager

Appointing and training a network of distributors in South East Asia to ensure annual sales targets are achieved through said distributors.

Regional Sales Manager

To ensure that sales targets are achieved by the distributors in each country in East Asia, West Asia and South East Asia. Provide management training to Export Sales Manager.

Founder & CEO of Magna Group of Companies 1990 till date.

Magna Group of Companies consists of **Magna International Pte Ltd, Magna Far East Pte Ltd, Magna Canada Inc, Magna Australia Pty Ltd and Magna Energy Pte Ltd.**

The Magna Group is one of the world's foremost leaders in the specialized fields of corrosion-preventive technology, specialty lubricants and cleaning surfactants. Since its incorporation in 1990, first starting out as a manufacturer and distributor of cleaning and maintenance chemicals, the Magna Group has now carved itself a niche in the area of Vapour Corroison Inhibitors (VCI) ,Bio-based lubricants, Heat Activated Technology Lubricants and additives, specialty surfactants, lubricants and additives.

The products of the Magna Group are marketed under the brands Vappro, Biolubri, Corpro , Viscopro, Legionella-X, Magna, and Lupromax.

Represented by distributors in more than thirty countries in the NAFTA Region, Asia Pacific and Europe, the Magna Group is continually reinventing itself to accommodate the ever-present changes in the chemical industry.

Magna has established itself as a brand of excellence. Over 200 products are listed in the NATO Master Cross Reference List (MCRL), with individually assigned NATO Stock Numbers for easy reference. With company headquarters in Singapore, the Magna Group's in-house Research & Developments team has made milestone achievements in corrosion-preventive technology, water treatment chemicals, lubricants and specialty surfactants.

Magna's focus on technical expertise, operational excellence, and its range of practical yet environmentally-friendly products has netted us the certification of the ISO 9001:2000 and ISO 14001. Magna Group is committed to achieve our mission of improving the lives of consumers, satisfying the needs of customers, and continuing our contribution to the chemical industry for the years ahead.

Founder and CEO of Magna Far East Chemical Pte Ltd since August 1990.

Founder and CEO of Magna International Pte Ltd since September 1992

Founder and Chairman of Magna Chemical Canada since in 1993.

Founder and CEO of Magna Energy Pte Ltd since 1995.

Founder and CEO of Magna Australia Pty Ltd since 2011.

Education

High School: Commonwealth Secondary School-General Certificate of Education GCE 'O' Level Certificate.
Singapore Primary Production Department: Certificate of Competency- Marine Engineering.

Training & Certification

Trained Lifeguard- U.K Certified Bronze Medallion from U.K. Royal Life Saving Society.
Certified U.K Teacher Certificate for Life Saving from U.K. Royal Life Saving Society.

Special Awards, Awards, Accolades & Recognition

2014 Top Entrepreneur Award-Singapore Small Medium Business Association. ~~(see page 15)~~

The Top Entrepreneur Award is an initiative hall-marked for Top local entrepreneurs based in Singapore who have shown exceptional business aptitude and notable success in their respective fields and industries. The Award recognises stellar performances, leadership Integrity, credibility, innovation, business sustainability, determination and social responsibility of entrepreneurs across diverse industries. Its primary purpose is to raise the profiles of outstanding businessmen and women to further cement their growing business legacy in Singapore and the region. In short it is a Pinnacle Business Excellence Award.

2014 Asia Business Excellence Award. ~~(see page 16)~~

Asia Excellence Award is a prestigious business accolade which recognizes the entrepreneurial elite in Asia. Asia Excellence Award is a solely independent media platform which features many successful corporations' knowledge and experiences for the readers. With such sharing of knowledge and experiences from the elites, Asia Excellence Award will serve as a catalyst to inspire future budding SMEs to aspire and achieve success in their entrepreneurial journey.

2014 World Stars Packaging Award. ~~(see page 17)~~

The World Star Packaging Award is a pre-eminent international award in packaging. The Award illustrates the continual advancement of the state of packaging design and technology and creates a living standard of international packaging excellence from which others may learn. World Stars Packaging are presented only to those packs which having already won recognition in a national or regional competitions, are compared by an expert panel of judges to similar packs from around the world. Awards are based on the judges' consensus that a pack is superior in its category and market and better in its class in execution or innovation by comparison to others. Since 1970, the World Packaging Organisation has given awards to numerous new packs from all around the world.

2014 Singapore Star Packaging Award. ~~(see page 18)~~

The Singapore Packaging Star Award is a prestigious national award honouring companies with innovative and creative packaging designs for their products. It recognizes and rewards excellence in packaging, in areas of construction and materials usage, design, innovation technology and environmental consciousness. The Award is presented to companies/students as part of the efforts from packaging industry to promote local designs and increases the standards of packaging production. The Singapore Packaging Star Award 2013 is organized by the Packaging Council of Singapore (PCS), an industry group under Singapore Manufacturing Federation (SMF). PCS is a member of the Asian Packaging Federation (APF) with affiliation to the World Packaging Organization (WPO).

Special Awards

2013 Top 10 Outstanding Achievement Award (Innovation Award) Singapore Promising SME 500.

~~The~~ Top 10 Outstanding Achievement Award is the Pinnacle Award for The Promising SME 500 Business Luminary. It is an Award depicting the journeys, the momentum and the vision exhibited by the Top 10 Business Luminaries. Each of these exceptional Luminaries has embarked a life-journey of history making proportions, forging a legacy, fast moving and gaining unstoppable momentum in their quest-with a solid foundation, direction and vision to keep them driven and on the right track. It is a testament of their inspirational stories of their successes, their fights and their victories.

2013 Top Business Luminary Award 2012 Singapore Promising SME 500.

The Promising SME 500 Business Luminary is a true blue entrepreneur, an individual of standing, business visionary of immaculate integrity, humility and skill. The Luminary stands a cut above the rest, in world filled with motion.

2013 Top 100 Singapore Excellence Award.

The Singapore Excellence Award is a prestigious business accolade which recognizes the entrepreneurial elite in Singapore. The Award features successful Small Medium Enterprises and entrepreneurs, and highlights their knowledge and experiences for the reader. With this sharing from the elite, the Singapore Excellence Award serves as a catalyst to inspire budding entrepreneurs in their business journeys.

2012 Promising SME 500 (Small Medium Business Association).
This prestigious Award is the very embodiment and expression of business success and recognition. The Award serves to appreciate the excellence and achievement of individuals who through sheer will, determination, wisdom, vision and integrity-have forged high-grounds within the landscape of society, building organisations that have driven employment, created value for customers and provided real sustainable solutions to the economy. Through this Award, many will also be touched and inspired by the true stories of success, sacrifice, inner fortitude, perseverance and courage and be emboldened to likewise dream and achieve the impossible.

2010 Awarded Certificate of Industrial Partners by Singapore Polytechnic

International & Local Recognition

2012 The Singapore Leading Inventor-Acclaimed by the national newspapers (The Straits Times, The New Paper, Asia One News, Asia Report) as The Singapore Leading Inventor. (*see attached newspaper)*

2012 Singaporean with the most Patents from IPOS-Recognised by the Intellectual Property of Singapore (IPOS) as the Singaporean with the most Patents. *(see attached Newspaper-The Straits Times)*

2008 Singapore Top 10 Patent Filers-Recognised by the Intellectual Property of Singapore (IPOS) as the Top 10 Patent Filers. *(see IPOS Publication for Top 10 Patent Filers 2008).*

2008 The Recognised Inventor of Legionella-X Disinfectant with 100% Killing Efficacy of H5N1 Disinfectant in Indonesia- Recognised by the major newspapers in Indonesia as the inventor of a High Efficacy Disinfectant that deactivates 100% H5N1 Virus. *(see attached Newspaper)*

Total Patents Registered: 25 patents registered.

Singapore Intellectual Property of Singapore (IPOS) - 16 registered patents
World Intellectual Property Office (WIPO)-5 registered patents
Taiwan Intellectual Property Office (TIPO) - 3 registered patents
European Union: 1 registered patent.

Registered & Granted Patents

1) Composition and Method of Manufacture of Heat Activated Chemical Biodiesel Based Oil Additive.
   Singapore Patent No. P-No.15646.

2) Composition and Process of Manufacturing of Biodiesel Grease By Gelling Biodiesel, Anti-Wear Additives, Extreme Pressure Additives, Water Repellent Additives and Anti-Oxidant Additives.
   Singapore Patent No. P-No. 154349.

3) Composition and method of manufacture of biodiesel metalworking fluids.
   Singapore Patent No. P-No. 155077

4) An Imperceptible Concept/Methodology of the Conversion of Biodiesel into a Range of Emulsifying and Degreasing Agents By Blending a Synergistic Blend of Chemicals With Biodiesel.
   Singapore Patent No. P-No 159413.

5) A Cleaning Method and Procedures for Cleaning Continuous Digester of Pulp & Paper.
   Singapore Patent No. P-No.158774.

6) A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Residues from the Barrels of Artillery Gun, Battle Tank and Firearm.
   Singapore Patent No. P-No. 153707.

7) An Internal Gun Bore Surface Scanner for Inspecting and Recording the Bore Condition of the Howitzer, Main Battle Tank and Gun Barrel with Diameter from 76mm to 240mm.
   Singapore Patent No. P-No. 157245.

8) VCI (Vapour Corrosion Inhibitor) Preservation Methodology of Armoured Vehicles, Battle Tanks, and Transport Vehicles over Cycles of Two Years.
   Singapore Patent No. P-No. 159428.

9) VCI (Vapour Corrosion Inhibitor) Preservation Methodology of 105 MM, 120 MM,155 MM, 240 MM AND 8 INCH Self-Propelled and Towed Howitzer Guns Over Cycles of Two Years.
   Singapore Patent No. P-No. 160259.

10) VCI (Vapour Corrosion Inhibitor) Preservation Methodology of Armoured Vehicles, Battle Tanks, and Transport Vehicles over Cycles of Two Years.
    Taiwan Patent No. P-No. I- 432695.

11) Composition and Process of Manufacturing of Biodiesel Grease By Gelling Biodiesel, Anti-Wear Additives, Extreme Pressure Additives, Water Repellent Additives and Anti-Oxidant Additives.
Registered with World Intellectual Property Organization (WIPO).
International Publication No. WO/2009/088360.
Publication Date: 19.12.2008.
International Application No. - PCT/SG2008/000121.

12) Composition and method of manufacture of biodiesel metalworking fluids.
Registered with World Intellectual Property Organization (WIPO).
International Publication No. WO/2009/10503 A1.
Date of Publication: 27.08.2009
International Application No.-PCT/SG2008/000114.

13) A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Residues from the Barrels of Artillery Gun, Battle Tank and Firearm.
Registered with the World Intellectual Property Organization (WIPO).
International Publication No. WO/2009/085013.
Date of Publication: 09.07.2009
International Application No. PCT/SG2008/00016.

14) A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Residues from the Barrels of Artillery Gun, Battle Tank and Firearm.
Registered with the European Patent Office (EPO).
European Publication No. EP 2238402
Date of Publication: 13.10.2010
International Publication No. WO/2009/085013 (09.07.2009 Gazette 2009/28).

15) Formulation and Chemical Composition of a High Efficacy Disinfectant against Avian Influenza H5N1 Virus.
Registered with the Intellectual Property of Singapore (IPOS).
Singapore Patent Application No. 201202810-6.
Date of Application for Grant of Patent: 17.04.2012.

16) Formulation and Chemical of Low Mammalian Toxicity Insecticide.
Registered with the World Intellectual Property Office (WIPO).
International Application No. PCT/SG2013/000306
Date of International Filing- 23.07.2013 *(see attached letter from IPOS)*

17) A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Residues from the Barrels of Artillery Gun, Battle Tank and Firearm.
Registered with Taiwan Intellectual Property Office (TIPO).
Taiwan Patent Application No. 97122209 *(see attached letter from lawyers of Wu & Woods).*

18) VCI (Vapour Corrosion Inhibitor) Preservation Methodology of 105 MM, 120 MM,155 MM, 240 MM AND 8 INCH Self-Propelled and Towed Howitzer Guns Over Cycles of Two Years.
Registered with Taiwan Intellectual Property Office (TIPO).
Taiwanese Patent Application No. 97142791 *(see attached letter from lawyers Wu & Woods).*

19) Formulation and Chemical Composition of a High Efficacy Disinfectant against Avian Influenza H5N1 Virus.
Registered with the Intellectual Property of Singapore (IPOS)
Singapore Application No. 210202810-6
Date of Priority Claim: 31/03/2008. *(See attached letter from IPOS)*

20) Chemical Composition of a Low-Mammalian Toxicity Insecticide.
Registered with World Intellectual Property Organization (WIPO).
International Application No. PCT/SG2013/00036.
Date of Application: 23rd July 2013. *(see attached patent publication)*

Total number of Inventions

More than 500 Chemical products, apparatus and equipment. Inventor of the following range of products:

Arguably one of the most prolific Singapore's leading inventors and has invented more than 500 chemical products, among the invention includes; **Vappro VCI** (Vapour Corrosion Inhibitor),**Lupromax HAT** (Heat Activated Technology Lubricant), **Vappro MRST** (Molecular Reaction Surface Technology), **CRIs** (Concrete Rebar Inhibitors), **Biolubri** (Bio-lubricant).**VBCI** (Vapour Bio-Corrosion Inhibitors),**CCIT** (Colloid Corrosion InhibitorTechnology), **Baczyme** (Bacillus Enzymatic Chemicals) **Corpro** (Cathodic & Anodic Corrosion Inhibitors) **Viscopro** (Viscosifier for hydrocarbon), **Magna** (Cleaning, Maintenance and Water Treatment Chemicals), **Legionella-X Disinfectants**(100% Killing Rate Efficacy Against H5N1 and Legionella pneumophila).

Inventions & Milestone Achievements

1) More than 200 of the products invented are listed in the **NATO MCRL (Master Cross Reference) List** with individual NATO Stock Number assigned to each listed product. *(see attached letter from NATO Supply and Maintenance Agency).*

2) Vappro VCI preservation procedure for military equipment has been endorsed and accepted by the Singapore Armed Forces, Taiwan Armed Forces, Malaysia Armed Forces and UAE Armed Forces. *(see attached manual & newsletter)*

3) Vappro VCI preservation procedure has been accepted by major oil and offshore industries.

4) Invented product Lupromax EA engine oil additive has entered the Indonesia World Record Museum for running a car and motorcycle without lubricant for 280 kilo meters and 8 hours after treatment with said additive. *(see attached certificate from Indonesia World Record Museum).*

5) Inventor of Legionella-X Disinfectant the only disinfectant in the world that has been tested against live H5N1 virus with 100% Killing Efficacy. *(see attached test report from University of Bogor Indonesia).*

6) Inventor of Legionella-X Hospital Grade Disinfectant that kills 99.99992 percent of Legionella pneumophila bacteria. *(see attached PSB Test Report).*

7) Inventor of a range of hospital grade disinfectants that passed the U.K. Kelsey Skyes Test. *(see attached test reports).*

8) United States of Department of Agriculture (USDA) Certified Biobased Product Label.

9) Inventor of Vappro 826 biodegradable VCI plastic film that won the Singapore Star and World Star Packaging Award *(see attached newsletter and Award Certificates).*

Current Research, Development & Endeavours

1) Research and development and hydrogen fuel technology by coupling water and diesel together using a proprietary surfactant with right HLB Value (Hydrophilic Lipophilic Balance Value). The said technology is considered a green technology because carbon emission will be reduced significantly the end by product is water.

2) Expansion on the application of Heat Activated Technology for Tapping & Drilling fluids, drilling collar compound, anti-seize compound, wire ropes by incorporating

solid additives such as graphite and copper powder to prevent galling and seizing of drill pipe joints.

3) Research and development of Environmental Acceptable Lubricants (EAL) that meet U.S. Vessel General Permit (VGP) in terms of OECD 21 days Biodegradability Test, Bio-Accumulation and toxicity.
4) Research and development of corrosion inhibitors against rebars in concrete.
5) Research and development of Nano Heat Activated Technology Lubricant.

20 PUBLICATIONS IN NATO MCRL (MASTER CROSS REFERENCE LIST).

Vappro Technical Preservation Manuals for Armoured Vehicles, Main Battle Tanks, Military Vehicles, Armaments and Equipment.

a) DN-SBV-960-LR-110-01: -NATO STOCK NO .7610-32-076-9792
b) DN-TW-IFV-2002-CM27-01: NATO STOCK NO.7610-32-077-0108
c) DN-TW-IFV-2002-CM21-01-NATO STOCK NO.7610-32-077-0109
d) DN-TW-IFV-2002-CM22-01-NATO STOCK NO.7610-32-077-0110
e) DN-TW—MBT-2002-CM11-01-NATO STOCK NO.7610-32-077-0111
f) DN-SG-ABCV-2002-FTF-01-NATO STOCK NO. 7610-32-077-0112
g) DN-TW-MBT-2002-M60A3-NATO STOCK NO. 7610-32-077-0113
h) DN-TW-MBT-2002-CM12-01-NATO STOCK NO. 7610-32-077-0114
i) DN-SG-AF-MWY/ABDR-01-NATO STOCK NO. 7610-32-077-0130760
j) DN-SG-155MM-2001-FH-2000-01-NATO STOCK NO. 7610-32-077-0131
k) DN-SG-SMALL ARMS-2003-M16-AR15-NATO STOCK NO. 7610-32-077-0143
l) DN-SG-LBT-960 SM1-01-NATO STOCK NO. 7610-32-077-0194
m) DN-SG-LBT-960-SLB-01-NATO STOCK NO. 7610-32-077-0195
n) DN-SG-960-AV-M113-APC-01-NATO STOCK NO. 760-32-077-0196
o) DN-SG-VPTM-2002-01-NATO STOCK NO. 7610-32-077-0228
p) DN-SG-VCTM-2002-01-NATO STCOK NO.7610-32-077-0229
q) DN-SG-960-AV-M113-40/50-01-NATO STOCK NO.7610-32-077-0359
r) DN-SG-AV-M113-OWS-01-NATO STOCK NO.7610-32-077-0360
s) DN-SG-960-AV-V200—01-NATO STOCK NO. 7610-32-077-0361
t) DN-DG-CV-200-COMET-01-NATO STOCK NO.7610-32-077-0363

The said manuals relates to a VCI preservation methodology of Armored Vehicles, Battle Tanks, and Transport Vehicles using a range of VCI (Vapor Corrosion Inhibitor) products over cycles of two years. It involves four methodological stages starting with Zero Point wherein change of engine oil, oil filters, steering oil, engine transmission oil, hydraulic fluids, fuel and fuel filter are carried out. The second stage involves the cleaning of interior and exterior of vehicles and treatment of inherent rust. Third stage involves the application of VCI products to essential systems of vehicle. Fourth stage involves the sealing of all openings of the vehicle.

A special object of the said manual is to provide an effective method using a range of Vapor Corrosion Inhibitor products to protect the said vehicles from corrosion and at the same time reduces the need of manpower after the said vehicles and equipment are kept in storage.

Another object of the said manual is to reduce the time or manpower required to change he engine oil of every vehicle every three to six months, thereby enhancing operational readiness and better deployment of soldiers to combatant role.

A further object is to keep the said vehicles operational ready by providing a total preservation to the chassis, fuel system, lubrication system, cooling system, hydraulic system, electrical and electronic system, rubber parts, weaponry system, steering system, gear boxes, engines, optics, and exhaust system.

The said manual has been used as reference for preservation of military equipment by Taiwan, Singapore, Malaysia and UAE Armed Forces.

Mothballing Manual for Rigs, Ships, Refineries, Power and Manufacturing Plants.

The said manual has been used as reference for preservation electrical equipment, electronic circuit board, and electrical junction boxes, hydro-testing of pipe lines, etc. by Seimen, Hyundai, Shell, Modec, Emerson, Singapore Mass Rapid Transport, Singapore Power Plants---------

BOOKS

Currently writing a book on **"Innovation and Intellectual Property the Essential Key to Success for Small & Medium Enterprises".**

PROFESSIONAL MEMBERSHIPS

Corporate Member of National Corrosion of Engineers (NACE).
Corporate Member of Society of Tribologist and Lubrication Engineers (STLE).
Corporate Member of World Corrosion Association (WCA).
Member of American Chemical Society (ACS).

COMMUNITY WORK AND SOCIAL RESPONSIBILTY

1) Supporting The World Children Fund
2) Supporting The Cambodian Orphanage
3) Supporting The Orphanage in Surabaya Indonesia.

Field of Endeavour

Working towards- A Cleaner, Greener and Better Tomorrow, as such, I develop green technology products. I create cutting-edge-technology products with the environment in mind.

2014 Top Entrepreneur™

The Pinnacle of Business Excellence

998 Toa Payoh North Industrial Estate #02-18/19 Singapore 318993
tel: (65) 6352 8971
email: media@topentrepreneur.com.sg
URL: www.topentrepreneur.com.sg

RE: THE TOP ENTREPRENEUR 2014 CAMPAIGN

Dear Mr Nelson Cheng

Congratulations on coming on board the **Top Entrepreneur 2014**!
We are pleased and honoured to have the opportunity to feature you and your esteemed company in our prestigious Campaign.

This annual Campaign showcases some of the most outstanding personalities in the world of Business in Singapore, from across diverse industries and disciplines. Through this platform, we recognize the excellence and achievements of this group of exceptional and successful individuals as well as celebrate their stories and legacies.

The **Top Entrepreneur** is more than just a title. You embody the essence of enterprise, success, hard work, integrity and business excellence and we are certain that your participation in our Campaign will not only lend this year's cohort a greater presence but will also serve to inspire budding entrepreneurs to follow in your footsteps toward fulfilling their dreams.

It is with this singular vision that the **Top Entrepreneur** Campaign was first conceived. We trust that through this Campaign, many lives will be touched and inspired by the compelling stories of success, creativity, courage, determination and diligence – and be spurred on to reach for ever greater heights.

We wish you and your esteemed company continued success in your business and may 2014 prove to be an even more fruitful year ahead. For further enquiries, kindly contact our Senior Media Executive, Ms. Alecia Tan, at +65 6352 8971.

Sincerely yours,

Ms Priscilla Tan
Director, Campaign Advisory Board
Top Entrepreneur 2014


AEA 20131400063
ASIA
EXCELLENCE
AWARD 2014
SUPREMACY & OUTMOST INTEGRITY
Proudly awarded to
Mr Nelson Cheng
International Pte Ltd
Magna
MAGNA (F.E.) CHEMICAL PTE LTD
FOR ACHIEVING EXCELLENCE INTEGRITY AND EXCEPTIONAL ACCOMPLISHMENTS IN ASIA BUSINESS FIELD
HORIZED SIGNATORY
29 November 2013
DATE
ASIA EXCELLENCE AWARD • SUPREMACY & OUTMOST INTEGRITY

To Whom It May Concern:

2014 Asia Excellence Award. Asia Excellence Award is a prestigious business accolade which recognizes the entrepreneurial elite in Asia. Asia Excellence Award is a solely independent media platform which features many successful corporations' knowledge and experiences for the readers. With such sharing of knowledge and experiences from the elites, Asia Excellence Award will serve as a catalyst to inspire future budding SMEs to aspire and achieve success in their entrepreneurial journey.

Mr Nelson Cheng, the founder of Magna International Pte Ltd, is one of the recipients of the 2014 Asia Excellence Award.

SINGAPORE ENRICH GROUP PTE LTD
59 Ubi Ave 1, Unit 07-05, Bizlink Centre, Postal Code 408938
T – (65) 6732 0608 F - (65) 6749 6388 E – seg@singaporeenrich.sg W – www.singaporeenrich.sg

Winner of the World Star 2014 Packaging Excellence.

WORLDSTAR
2014
AWARDS FOR
PACKAGING
EXCELLENCE

Awarded to

Magna International Pte Ltd

For

Vappro 826

President
Tom L Schneider

General Secretary
Keith Pearson

WPO
WORLD PACKAGING ORGANISATION

WPO
WORLD PACKAGING ORGANISATION

WPO | WorldStar Administration
c/o The Packaging Society, IOM3
The Boilerhouse, Claunt Road,
Springfield Business Park,
Grantham, NG31 7FZ, UK
Rachel Brooks
WorldStar Administrator
rachel.brooks@worldstar.org
tel +44(0) 1476 513885
fax +44(0) 1476 513899
www.worldpackaging.org
www.worldstar.org

22 April 2014

To whom it may concern

2014 World Stars Packaging Award

On behalf of the World Packaging Organisation I am writing to inform you that your entry listed below is a WorldStar Winner! Many congratulations!

Magna International Pte Ltd for Vappro 826

The World Star Packaging Award is a pre-eminent international award in packaging. The Award illustrates the continual advancement of the state of packaging design and technology and creates a living standard of international packaging excellence from which others may learn. World Stars Packaging are presented only to those packs which having already won recognition in a national or regional competitions, are compared by an expert panel of judges to similar packs from around the world.

Awards are based on the judges' consensus that a pack is superior in its category and market and better in its class in execution or innovation by comparison to others.

Since 1970, the World Packaging Organisation has given awards to numerous new packs from all around the world.

Once again congratulations on your achievement.

With best regards

Keith Pearson
WPO General Secretary

Rachel Brooks
WorldStar Administrator

Winner of the Singapore 2014 Star Packaging Award

PCS
Packaging Council of Singapore

Award for Packaging Excellence

The Singapore Packaging Star Award 2013
is awarded to

Magna International Pte Ltd

for

VAPPRO 826

in the

Transport & Protection Category

Ms Annabelle Tan
Chairman, Packaging Council of Singapore

PCS
Packaging Council of Singapore
An Industry Group of Singapore Manufacturing Federation

Singapore Manufacturing Federation
新加坡制造商总会
Since 1932

27 September 2013

Mr Nelson Cheng
Magna International Pte Ltd
10H Enterprise Road, Singapore 629834

Dear Mr Cheng

Congratulations! Winner of the Singapore Packaging Star Award 2013

Our heartiest congratulations to Magna International Pte Ltd for winning the Singapore Packaging Star Award 2013 organised by the Singapore Manufacturing Federation (SMF) and the Packaging Council of Singapore (PCS) held on Thursday, 12th September 2013!

We are pleased to inform you that the following entry from your company is one of the winning entries for the Commercial Transportation and Protection Category.

COMMERCIAL TRANSPORTATION AND PROTECTION CATEGORY WINNER	
COMPANY	**ENTRIES**
Magna International Pte Ltd	Vappro 826

Upon winning this National Award, your entry is eligible to participate in the AsiaStar 2013 and WorldStar 2013. Entries for AsiaStar and World Star Awards are now open for registration. The closing dates are 1 October 2013 and 4 October 2013 respectively. Do not miss these opportunities to gain international recognitions and break into the world markets.

Thank you and should you need further clarification or information you may contact Ms Veron Koh at DID 68263045 or email veronkoh@smfederation.org.sg

Yours truly

Ms Annabelle Tan
Chairman
Packaging Council of Singapore
Singapore Manufacturing Federation


TOP 20
OUTSTANDING ACHIEVEMENT AWARDS
PROMISING SME 500 2013
INNOVATION AWARD
MR NELSON CHENG
Magna International Pte Ltd
PROMISING SME500
MS. CHRISTINA FAN
DIRECTOR, ENTERPRISE DEVELOPMENT
BEYOND THE PINNACLES OF EXCELLENCE
STRIVING FOR THE IMPOSSIBLE
Serial No.: PSME500137005

MAGNA INTERNATIONAL PTE LTD

MAGNA NEWSLETTER

RESTRICTED | **September 2013** | ISSUE NO 9

Singapore Promising SME 500 Top 10
Special Achievement Award-Innovation Award 2013

Mr. Nelson Cheng President/CEO Magna receiving the Promising SME 500 Top 10 Special Achievement Award-Innovation from Mr. Heng Chee How Senior Minister of State, Prime Minister's Office.

To God be the Glory, once again Magna International has been nominated by Promising SME 500 as one its top business luminaries 2013. In addition to the Top Business Luminary Award, this year Magna International has won the Top 10 Special Achievement Award-Innovation Award.

All top 10 special achievement award recipients underwent stringent selection process. The Special Achievement Award recipients went through two gruelling rounds of selection.

The first round is an internal selection based on supporting documents submitted by the business luminaries, confidential surveys and inputs from the organisers and a seven-member advisory panel made up of professionals in various industries including law, accountancy, finance and human resources.

The second round involves a face-to-face interview with the advisory panel and final recipients were selected based on the company's vision and mission integration and implementation, core competencies, unique selling point, management capabilities, market research, accomplishment, accolades and milestones attained.

Promising SME 500 Award is one of the reputable business' awards in Singapore initiated by Small Medium Business Association (SMBA), to recognize and acknowledge promising small and medium business enterprises in recognition of company's achievements, good business practices, operational efficiency, leadership, sustainability, value and use of modern technology to create for customers, firm and its partners.

All Awardees have been carefully selected from a pool of nominations. To maintain the integrity of the selection process, SMBA board works closely with an independent Advisory Judging Panel made up from the industry top executives and consultants including law, accountancy, finance and Human Resources.. The main focus of SMBA is to recognize and acknowledge the nation top 500 promising local SMEs for deliverance of their ethics and professionalism in their business practices. Such practices will definitely bring about growth and prosperity for the economy of the nation.

We are thankful to God to have received such an honourable award and delighted to be selected as one of the top 500 winning companies in Singapore and also the first to represent Singapore Chemical Industry to receive the Top 10 Special Achievement Award-Innovation Award.
Last but not least we wish to express our heartfelt thanks to all our customers, distributors and worldwide business associates.

To God be the Glory!

23rd April 2014

ATTN: TO WHOM IT MAY CONCERN

RE: SPECIAL RECOGNITION IN THE PROMISING SME 500 2013 BRAND CAMPAIGN

Dear Sir / Madam,

We are pleased and honored to inform you that Mr Nelson Cheng of Magna International Pte Ltd has been successfully recognized for the following:

TOP 20 OUTSTANDING ACHIEVEMENT CATEGORY
- TOP 10 SPECIAL ACHIEVEMENT AWARDS (INNOVATION AWARD)

in the prestigious **Promising SME 500 2013 Brand Campaign**.

The Top 20 Outstanding Achievement Awards is the top recognition conferred on our Promising SME 500 Business Luminaries. It depicts the journeys, drive and the vision exhibited by all our Top 20 Business Luminaries. Each of these exceptional Luminaries has embarked on a life-journey of history making proportions and have served as an inspiration to a whole new generation of aspiring young entrepreneurs. This recognition is a testament of the success and contributions of Magna International Pte Ltd in our economy, cementing its status as a fore-runner in local enterprises.

On behalf of the organizers, we would like to wish Mr Nelson Cheng and his esteemed company all the very best in his business and may 2014 be a prosperous and fruitful year for one and all at Magna International Pte Ltd.

Sincerely yours,

Ms. Priscilla Tan
Chief Secretariat
Promising SME 500

RECOGNIZING THE NATION'S TOP BUSINESS LUMINARIES

PROMISING™ SME 500 2013

TOP BUSINESS LUMINARY

MR NELSON CHENG

Magna International Pte Ltd

MS. CHRISTINA FAN
DIRECTOR, ENTERPRISE DEVELOPMENT

SMBA and Partners are dedicated to recognizing and establishing excellent business practices amongst local Small and Medium Enterprises, inculcating greater innovation, promoting higher industry service levels and advocating uncompromising business ethics. Together with our Partners and Associates, we strive to build a dynamic, robust and ever forward looking business climate in Singapore.

Service . Integrity . Innovation . Motivation . Creativity

Serial No.: SMBA13061660L

LEFT BLANK INTENTIONALLY


A CUT ABOVE THE REST
2013
SINGAPORE
EXCELLENCE AWARD
PROUDLY PRESENTED TO:
Mr Nelson Cheng
International Pte Ltd
Magna
MAGNA INTERNATIONAL PTE LTD
FOR HAVING DEMONSTRATED EXCEPTIONAL ACCOMPLISHMENTS
IN THE BUSINESS FIELD
AUTHORIZED SIGNATORY
20/10/2012
DATE
Certificate Number : JA 1309-13-31

RECOGNIZING BUSINESS EXCELLENCE

PROMISING™ SME 500 2012

PLATINUM CATEGORY

MR NELSON CHENG

MAGNA INTERNATIONAL PTE LTD

MS. LILY CHUNG

DIRECTOR, ENTERPRISE DEVELOPMENT

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Service . Integrity . Innovation . Motivation . Creativity

Serial No.: SMBA12061485U

MAGNA INTERNATIONAL PTE LTD

MAGNA NEWSLETTER

RESTRICTED | November 2012 | ISSUE NO 7

Magna International Attains Promising SME 500 Award 2012 (Platinum Category)

President/CEO Nelson Cheng receiving the award

SINGAPORE POLYTECHNIC

Industrial Training Programme Participation Award

The Singapore Polytechnic is proud
to acknowledge the educational spirit
of

MAGNA INTERNATIONAL PTE LTD

as reflected in its participation in the
Polytechnic's
Industrial Training Programme
for the last 10 years

Tan Hang Cheong
Principal

Singapore's leading inventor: 'I go around looking for trouble'

By Jennifer Dhanaraj
The New Paper
Wednesday, Mar 20, 2013

SINGAPORE - Meet Singapore's leading inventor.

And when he says "eureka" - it is potentially worth a couple of million dollars.

Mr Nelson Cheng, 56, is the president and founder of local chemical company Magna International.

According to the Intellectual Property Office of Singapore (Ipos), while the Agency for Science, Technology and Research (A*Star) - the nation's lead agency for scientific research - has consistently been the local leader in applying for patents, the individual who has obtained the most patents is Mr Cheng.

He has eight patents locally - which, according to him, already have a commercial value of "hundreds of millions".

When we meet him in his office on Enterprise Road, the wall of its conference room is adorned with gold and silver certificate plaques of successful patent grants from all over the world.

In all, he has filed 16 patents worldwide. These include ones in Taiwan and the European Union for the same inventions that he has patented here. This is to "protect his inventions" in overseas markets.

"Every time I am awarded a patent, I still feel immense joy. It never gets old," he says with a twinkle in his eye.

His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

Mr Cheng filed his first patent with Ipos in 2007 - and it was a long, drawn out process.

Recognized by the AsiaOne News as the Singapore Leading Inventor

More R&D patents going to local inventors

Patent numbers up by one-third; applications rise 10%

(http://www.stasiareport.com/sites/straitstimes.com/files/ST_20130302_PSPATENT1_3649689a.jpg)

Magma International president and CEO Nelson Cheng, in the company's lab with a chemist at work, is the Singaporean with the highest number of patents from the Intellectual Property Office of Singapore. – PHOTO: JOSEPH NAIR FOR THE STRAITS TIMES

8 patents worth 'hundreds of millions of dollars'

SINGAPORE'S leading inventor Nelson Cheng Kit Yew estimates that his eight patents have a commercial value of "hundreds of millions of dollars".

"This is based on industry field feedback and market evaluation," said the president and chief executive of Singapore chemical company Magna International.

Most of his patents are to fight corrosion.

"Corrosion is a US$220 billion (S$274 billion) problem in the United States alone," said the 56-year-old Singaporean, who trained as a marine engineer.

"All metals corrode, hence there is a huge market for anti-corrosion products," he added.

Mr Cheng, who filed his first patent with the Intellectual Property Office of Singapore in 2007, said his innovations range from the composition and manufacture of biodiesel lubricants to corrosion inhibitors and even an "internal gun bore scanner".

The scanner is used to inspect and record the internal bore condition of some battle tanks and gun barrels of a specified diameter range.

It can capture detailed information of any fouling, nicks, corrosion, major blemishes, heat-cracking and erosion or excessive wear of the surface, he added.

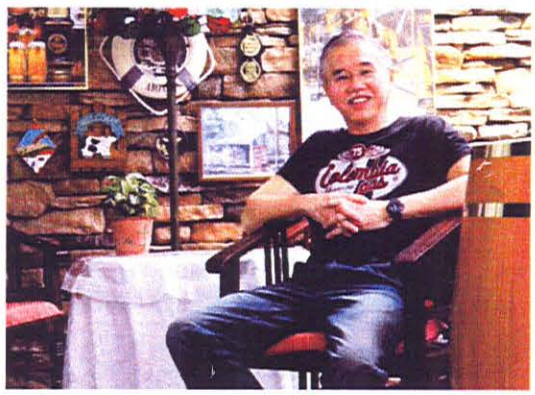
Mr Cheng said he plans to get several more patents.

Reported in Asia Report as the Singapore Leading Inventor

S'pore's leading inventor: I go around looking for trouble

March 17, 2013 - 12:51am

By: Jennifer Dhanaraj



TNP PHOTO: Benjamin Seetor

Meet Singapore's leading inventor, Mr Nelson Cheng, 56, the president and founder of local chemical company Magna International. He has got eight patents locally and 16 patents worldwide.

His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

So how does he come up with his ideas?

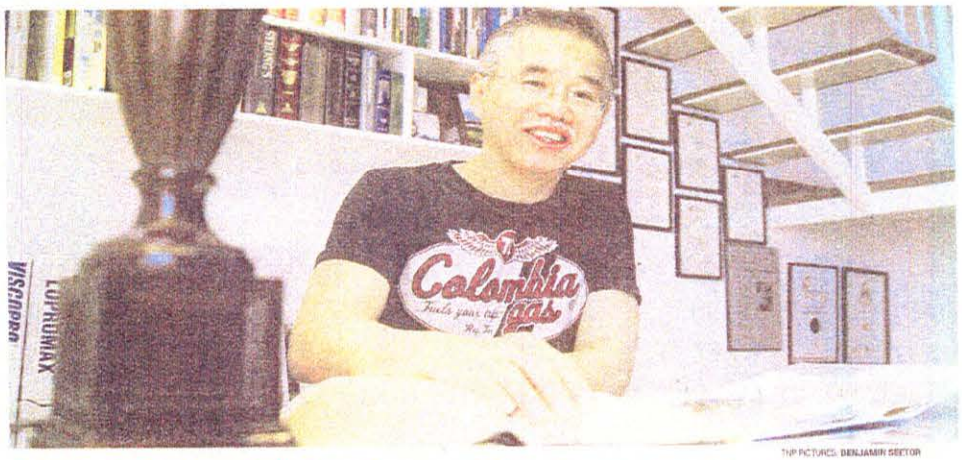
Mr Cheng says: "I go around looking for trouble".

Tags: inventions

Recognized as the Singapore Leading Inventor by New Paper

14 17 March 2013 · THE NEW PAPER ON SUNDAY

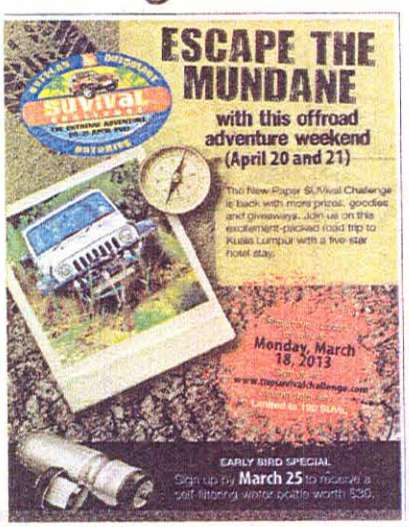
PEOPLE



TNP PICTURES: BENJAMIN SEETOR

S'pore's leading inventor Nelson Cheng reveals how he comes up with ideas

'I go around looking for trouble'



REPORT: JENNIFER DHANARAJ
djenn@sph.com.sg

Meet Singapore's leading inventor.

And when he says "eureka" – it is potentially worth a couple of million dollars.

Mr Nelson Cheng, 55, is the president and founder of local chemical company Magna International.

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His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

Mr Cheng filed his first patent with Ipos in 2007 – and it was a long, drawn out process.

"For almost two weeks, I was staring at a blank piece of paper, with a pen in my hand, every night," he says, laughing.

He recalls being huddled up in a corner of his study for hours at a time.

"Once, I typed the title of my invention. I was just stuck. I didn't know what else to write."

Mr Cheng's wife would bring him snacks and sweets in a bid to encourage him – but that didn't work.

And eventually, he wrote a sentence. From then on, with his wife's words of support, he wrote one to two sentences every day till he finished writing the patent.

This process took about six months.

But practice makes perfect, he says.

Now, filling up the paperwork for the patents takes only about 10 days.

Mr Cheng says his inventions are crucial to the success of his medium-sized company.

He wasn't interested in inventing when he was a child, he says. Just like his two children, 17 and 24, who have no interest now in coming up with patentable ideas.

He started late too – at 50 – and filing patents was a means to propel his company forward.

"Bigger multinational companies often bullied ours as they would share our technologies and then refuse to sign a non-disclosure agreement with us hence profiting from the ideas," says Mr Cheng ruefully.

Now, his company, founded in 1990, can protect its ideas.

With a hint of triumph in his voice, he says: "We are like David and the bigger companies are Goliath. Basically our patents are like David's stones on a slingshot."

So how does he come up with his ideas?

Mr Cheng says: "I go around looking for trouble.

"Other people avoid problems, but I like them."

During sales meetings, bottom line profits are often at the bottom of the agenda, he says.

Indeed, staff and distributors are encouraged to "complain" about inefficiencies.

"I will then start looking for solutions to these problems," says Mr Cheng.

Recognized by National Newspaper as the Singapore Leading Inventor

The Singaporean who has obtained the most patents from the Intellectual Property of Singapore (IPOS)

Magma International president and CEO Nelson Cheng, in the company's lab with a chemist at work, is the Singaporean with the highest number of patents from the Intellectual Property Office of Singapore. PHOTO: JOSEPH NAIR FOR THE STRAITS TIMES

More R&D patents going to local inventors

Patent numbers up by one-third, applications rise 10%

By HOE PEI SHAN

SINGAPORE is getting more innovative, with local inventors awarded nearly one-third more patents in a year.

The number of applications for patents has also risen, by almost 10 per cent, according to the latest National Survey of Research and Development (R&D) in Singapore.

The findings are "heartening", said chief executive officer Low Teck Seng of the National Research Foundation, a unit in the Prime Minister's Office that sets the national direction for R&D.

"They show our research strategy is yielding results," Professor Low told The Straits Times.

The survey is conducted annually by the Agency for Science, Technology and Research (A*Star).

It shows the number of R&D patents shot up from 653 to 855 in 2011, a 31 per cent increase.

The rise coincides with the record $7.4 billion Singapore had pumped into the R&D sector the same year.

At the same time, applications to the Intellectual Property Office of Singapore (Ipos) climbed from 1,762 to 1,915, a rise of 8.6 per cent.

The sector that owned the most patents as of 2011 was manufacturing, particularly electronics, precision engineering and biomedical.

Public research institutes and institutions of higher learning dominate the field of patents resulting from local R&D.

A*Star, the nation's lead agency for scientific research, has consistently been the local leader in applying for patents.

The Singaporean who has obtained the most patents from Ipos is 56-year-old Nelson Cheng Kit Yew (see box), president and chief executive of Singapore chemical company Magna International.

But success should also be measured by how the research and innovation are turned "into solutions with economic and social impact", said Prof Low.

He noted that the output of biomedical sciences manufacturing has more than tripled, from $6.3 billion in 2000 to $23.3 billion in 2010, and created 14,000 jobs by the end of 2010.

A*Star, for instance, said last December that its technologies could generate more than $500 million in commercial value for companies in the coming years.

One example is its H5N1 bird flu diagnostic kit that allows doctors to rapidly and accurately detect all existing strains of the H5N1 virus in a single test.

The strategic focus on such areas as biomedical

THE STRAITS TIMES
SATURDAY, MARCH 2, 2013

8 patents worth 'hundreds of millions of dollars'

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Mr Cheng, who filed his first patent with the Intellectual Property Office of Singapore in 2007, said his innovations range from the composition and manufacture of biodiesel lubricants to corrosion inhibitors and even an "internal gun bore scanner".

The scanner is used to inspect and record the internal bore condition of some battle tanks and gun barrels of a specified diameter range.

It can capture detailed information of any fouling, nicks, corrosion, major blemishes, heat-cracking and erosion or excessive wear of the surface, he added.

Mr Cheng said he plans to get several more patents.

"These would be mainly lubricants for military use and some vapour corrosion inhibitors for oil and gas industries."

HOE PEI SHAN

More R&D patents going to local inventors

Patent numbers up by one-third, applications rise 10%

By HOE PEI SHAN

SINGAPORE is getting more innovative, with local inventors awarded nearly one-third more patents in a year.

The number of applications for patents has also risen, by almost 10 per cent, according to the latest National Survey of Research and Development (R&D) in Singapore.

The findings are "heartening", said chief executive officer Low Teck Seng of the National Research Foundation, a unit in the Prime Minister's Office that sets the national direction for R&D.

"They show our research strategy is yielding results," Professor Low told The Straits Times.

The survey is conducted annually by the Agency for Science, Technology and Research (A*Star).

It shows the number of R&D patents shot up from 655 to 855 in 2011, a 31 per cent increase.

The rise coincides with the record $7.4 billion Singapore had pumped into the R&D sector the same year.

At the same time, applications to the Intellectual Property Office of Singapore (Ipos) climbed from 1,762 to 1,913, a rise of 8.6 per cent.

The sector that owned the most patents as of 2011 was manufacturing, particularly electronics, precision engineering and biomedical.

Public research institutes and institutions of higher learning dominate the field of patents resulting from local R&D.

A*Star, the nation's lead agency for scientific research, has consistently been the local leader in applying for patents.

The Singaporean who has obtained the most patents from Ipos is 56-year-old Nelson Cheng Kit Yew (see box), president and chief executive of Singapore chemical company Magna International.

But success should also be measured by how the research and innovation are turned "into solutions with economic and social impact", said Prof Low.

He noted that the output of biomedical sciences manufacturing has more than tripled, from $6.3 billion in 2000 to $23.3 billion in 2010, and created 14,000 jobs by the end of 2010.

A*Star, for instance, said last December that its technologies could generate more than $500 million in commercial value for companies in the coming years.

One example is its H5N1 bird flu diagnostic kit that allows doctors to rapidly and accurately detect all existing strains of the H5N1 virus in a single test.

The strategic focus on such areas as biomedical sciences, clean water and interactive and digital media has benefited Singapore, said Prof Low.

"These have sharpened our competitive edge and generated new growth."

hpeishan@sph.com.sg

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Magma International president and CEO Nelson Cheng, in the company's lab with a chemist at work, is the Singaporean with the highest number of patents from the Intellectual Property Office of Singapore. PHOTO: JOSEPH NAIR FOR THE STRAITS TIMES

Recognized by the National Newspaper-The Straits Times, as the Singaporean who has obtained the most patents from the Intellectual Property of Singapore (IPOS).2

IPOS
INTELLECTUAL PROPERTY
OFFICE OF SINGAPORE

Singapore Government
Integrity · Service · Excellence

Top 10 Local-Based Filers of Patent Applications in Singapore in 2008

Rank	Applicant	No. of Applications
1	Agency for Science Technology and Research	118
2	Chartered Semiconductor Manufacturing Ltd	74
3	STATS Chippac Ltd	48
4	Creative Technology, Ltd	32
5	Nanyang Technological University	19
6	National University of Singapore	18
7	Cheng Kit Yew	13
8	ASM Technology Singapore Pte Ltd Singapore Technologies Aerospace Ltd	11
9	STMicroelectronics Asia Pacific Pte Ltd	10
10	Singapore Technologies Dynamics Pte Ltd Turbine Overhaul Services Pte Ltd United Test And Assembly Center Ltd	8

(As at Jan 2009)

2008 Singapore Top 10 Patent Filers

SEPUTAR INDONESIA

Antivirus Flu Burung Ditemukan

Persebaran H5N1 Bisa Dicegah

JAKARTA (SINDO) – Institut Pertanian Bogor (IPB) berhasil mengembangkan disinfektan yang mampu membunuh berbagai virus, termasuk virus flu burung (H5N1).

Bahan disinfektan dalam penemuan ini berasal dari zat amonium kuartener yang selama ini dikenal sebagai salah satu bahan baku deterjen. Dosen ahli patologi Fakultas Kedokteran Hewan (FKH) IPB Bogor drh Agus Setiyono MS mengatakan, selama ini amonium kuartener punya kelebihan.

"Di antaranya rendah toksin (racun) dan cepat membunuh virus," kata Agus Setiyono dalam pemaparan penemuannya di Jakarta kemarin. Menurut Agus, pengujian amonium kuartener sebagai disinfektan virus flu burung dilakukan oleh FKH IPB dalam sebuah riset pada 2008.

Pengujian dilakukan di Unit Pelayanan Mikrobiologi Medik Terpadu, Bagian Mikrobiologi Medik, serta Departemen Ilmu Penyakit Hewan dan Kesehatan Masyarakat Veteriner (IPHK). "Kami menguji amonium kuartener dengan isolat virus H5N1 yang ditemukan dalam kasus di Tasikmalaya pada 2005 yang berasal dari Bagian Mikrobiologi FKH IPB," tandasnya.

Agus menjelaskan, dalam konsentrat tinggi, amonium dapat mematikan embrio. "Kalau disemprotkan itu justru bagus sebagai disinfektan yang memang terbukti 100% efektif membunuh virus flu burung," tuturnya.

Agus menjelaskan, khusus di Indonesia, hingga tahun 2008 tercatat sebanyak 132 kasus dengan 107 orang meninggal dunia akibat terinfeksi virus H5N1 atau juga disebut Avian Influenza. "Hasil penelitian IPB ini menjadi titik tolak untuk antisipasi lebih gencar," kata Agus.

Perusahaan Magna International Pte Ltd Singapura sebelumnya mengembangkan disinfektan tersebut dengan mengeluarkan Magna Legionella-X sejak 4,5 tahun lalu.

Chief Executive Officer (CEO) Magna International Pte Ltd Nelson Cheng mengharapkan disinfektan ini mampu memutus mata rantai penularan virus H5N1. "Ini upaya untuk membantu individu, rumah sakit, dan peternak ayam untuk mengendalikan pandemi," tuturnya.

Sementara itu, dalam pidato pembukaan masa sidang IV DPR, Ketua DPR Agung Laksono mengatakan posisi Indonesia yang menempati peringkat pertama kasus flu burung hendaknya dapat memacu pemerintah menanggulangi penularan virus tersebut.

(rendra hanggara/ mohammad sahlan/ dian widiyanarko)

Acclaimed by the Indonesia Seputar Newspaper as the Inventor of Legionella-X Disinfectant that Deactivates H5N1 Avian Flu Virus 100%

Acclaimed by Indo. Pos Newspaper in Indonesia as the Inventor of Magna Legionella-X Disinfectant that Deactivates 100% Avian Flu Virus.

SELASA 13 MEI 2008

INDO • POS

Sudut Pandang Jakarta

BERLANGGANAN HUBUNGI CS. 021.53699568

Disinfektan Magna Legionella-X Efektif Bunuh Virus Flu Burung

VIRUS flu burung (H5N1) masih menjadi momok masyarakat. Sekalipun pemerintah terus berupaya menghentikan virus mematikan ini dengan kerja keras, flu burung tetap jadi ancaman. Pasalnya, belum ada cara efektif membasmi virus mematikan ini.

Kondisi tersebut membuat para pakar dan perusahaan farmasi berupaya mencari obat pembunuh virus H5N1. Seperti yang dilakukan Magna International Pte Ltd.

Perusahaan Singapura ini mengembangkan penelitian sejak 4,5 tahun lalu ketika negara itu dilanda virus flu burung. Hasil penelitian itu menghasilkan Magna Legionella-X yang diklaim sebagai disinfektan pembunuh virus flu burung.

Disinfektan ini tergolong deterjen kationik mengandung *twin chain ammonium kuartener* yang bisa membunuh bermacam virus, jamur terutama H5N1.

"Kita tak ingin kejadian pahit terulang lagi dengan menyebarnya virus yang membunuh banyak orang. Kita berupaya membantu individu, rumah sakit dan peternak ayam mengendalikan pandemi ini," kata CEO Magna International Nelson Cheng.

Nelson mengatakan produk ini telah diuji laboratorium oleh pakar-pakar terkemuka dari IPB Bogor. Hasilnya, terbukti bisa 100 persen membunuh H5N1.

Nelson mengharapkan disinfektan ini mampu memutus rantai penularan virus H5N1. Karena,

kemasan yang mudah dibawa dengan cukup menyemprotkan saja.

Menurut pakar IPB Agus Setiyono, disinfektan ini bisa merusak membran sel virus dengan cara menurunkan tegangan permukaan dan melarutkan membran pospholipida. (YOG)

INDO.POS · Jawa Pos News Network (JPNN)
JAKARTA RAYA
Selasa 13 Mei 2008 13

Singapura Buat Disinfektan Flu Burung

BIKINAN LUAR: Pengenalan disinfektan untuk membasmi flu burung.

VIRUS *avian influenza* (flu burung) yang ditemukan pada unggas bisa dibasmi sebelum menginfeksi manusia. Virus yang dikenal dengan H5N1 itu bisa dibentengi sebelum menginfeksi unggas atau ternak sehingga tidak menular pada manusia.

Kemarin, sebuah perusahaan dari Singapura memperkenalkan sebuah disinfektan untuk menghambat perkembangan virus flu burung pada unggas. Disinfektan jenis detergen Magna Legionella-X itu dikembangkan dari *isolate* virus AI H5N1 Tasikmalaya sejak 2005 lalu.

"Tidak masalah kalau virus *avian influenza* kini telah bermutasi dengan cepat. Sebab disinfektan itu tidak hanya membunuh virus, tapi juga jamur dan bakteri," kata drh Agus Setiyono MS PhD, ahli patologi FKH IPB Bogor dalam diskusi Disinfektan Pembunuh Virus Flu Burung di Hotel Ciputra, kemarin.

Agus menjelaskan, perpindahan virus dari hewan ke manusia bisa dihambat dengan penggunaan disinfektan. "Virus avian influenza dikenal sebagai mahluk *zoonosis* dengan tingkat kematian 90-100 persen dalam waktu 48 jam," tutur Agus.

Disinfektan baru itu akan didaftarkan di Departemen Pertanian dan diklaim aman bagi lingkungan. Nantinya disinfektan itu diproduksi di dalam negeri (Indonesia). **(aya)**

Acclaimed by the Jakarta Raya Newspaper as the Singapore Inventor of Legionella-X Disinfectant against H5N1 Virus.

MEDIA INDONESIA
SELASA, 13 MEI 2008/NO.9974/TAHUN XXXIX
www.mediaindonesia.com

FLU BURUNG

Disinfektan AQ Bunuh Virus

JAKARTA (MI): Disinfektan berbahan *ammonium quaternary* (AQ) dapat mencegah penyebaran virus flu burung secara efektif. Bahan tersebut mampu membunuh mikroorganisme seperti bakteri, virus, spora, dan jamur.

"Setelah dilakukan beberapa kali uji coba, terbukti *ammonium quaternary* terbukti 100% dapat membunuh virus flu burung," kata Kepala Bagian Departemen Patologi Fakultas Kesehatan Hewan Institut Pertanian Bogor (IPB) Agus Setiyono di Jakarta, kemarin.

Pengujian *ammonium quaternary* dilakukan dengan menggunakan isolat virus *avian influenza* (AI) H5N1 di Tasikmalaya pada 2005. Kendati uji coba hanya menggunakan isolat virus H5N1, Agus meyakini disinfektan itu dapat membunuh virus flu burung secara efektif.

Ia menjelaskan pada uji coba, disinfektan *ammonium quaternary* disemprotkan ke kandang unggas. Terbukti, selama 48 jam, ayam yang terdapat dalam kandang unggas itu terlindungi dari serangan virus dan spora.

Dari pantauan di berbagai negara, menurut Agus, sejumlah negara seperti Kanada, Singapura, dan beberapa negara maju juga menggunakan disinfektan *ammonium quaternary* yang berjenis *twin-chain ammonium quaternary*.

Pada kesempatan yang sama, Chief of Executive Officer (CEO) Magna International Pte Ltd Singapore Nelson Cheng mengatakan disinfektan berbahan *twin-chain ammonium quaternary* telah dikembangkan sejak 4,5 tahun lalu di Singapura.

Disinfektan itu bahkan telah digunakan saat penyakit *severe acute respiratory syndrome* (SARS) merebak di Singapura. "Dengan penyemprotan yang benar, disinfektan *twin-chain ammonium quaternary* dapat mencegah kemungkinan terjadi wabah flu burung," tutur Nelson.

> 'Dengan penyemprotan yang benar, disinfektan *twin-chain ammonium quaternary* dapat mencegah kemungkinan terjadi wabah flu burung.'
>
> **Nelson Cheng - CEO Magna International Pte Ltd Singapore**

Sementara itu, Agus menyarankan agar penggunaan disinfektan berbahan triklosan dan fenol tidak lagi digunakan sebagai bahan penyemprot pembasmi virus, jamur, dan kuman untuk peternakan unggas di Indonesia.

Menurut Agus, disinfektan mengandung triklosan berpotensi menyebabkan kanker kulit. Pasalnya, triklosan termasuk bahan yang bersifat karsinogenik atau bahan yang dapat memicu penyakit kanker.

"Bila disinfektan itu mengenai tangan penyemprot, kulit yang bersangkutan dapat terserang penyakit kanker kulit," ujarnya. Selain itu, triklosan dapat memicu resistensi virus pada bahan disinfektan. Hal yang sama terjadi pada disinfektan berbahan fenol.

(Tlc/H-2)

Acclaimed by Media Indonesia Newspaper as the Singapore Inventor of Legionella-X Disinfectant against Avian Flu H5N1 Virus.

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 156546 has been granted in respect of an invention having the following particulars:

Title	:	COMPOSITION AND METHOD OF MANUFACTURE OF HEAT ACTIVATED CHEMICAL BIODIESEL BASED OIL ADDITIVE.
Application Number	:	200803165-0
Date of Filing	:	24 April 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	31 October 2011

Dated this 31st day of October 2011.

Tan Yih San
Registrar of Patents
Singapore

Inventor and Patent Owner of "Composition and Method of Manufacture Heat Activated Chemical Biodiesel Based Oil Additives".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 154349 has been granted in respect of an invention having the following particulars:

Title	:	COMPOSITION AND PROCESS OF MANUFACTURING OF BIODIESEL GREASE BY GELLING BIODIESEL, ANTI-WEAR ADDITIVES, EXTREME PRESSURE ADDITIVES, WATER REPELLENT ADDITIVES AND ANTI-OXIDANT ADDITIVES.
Application Number	:	200800305-5
Date of Filing	:	11 January 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	15 June 2010

Dated this 15th day of June 2010.

Chiam Lu Lin (Ms)
Deputy Registrar of Patents
Singapore

Inventor and Patent Owner of "Composition and Process of Manufacturing of Biodiesel Grease by Gelling Biodiesel, Anti-Wear Additives, Extreme Pressure Additives, Water Repellent Additives and Anti-Oxidant Additives".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 155077 has been granted in respect of an invention having the following particulars:

Title	:	COMPOSITION AND METHOD OF MANUFACTURE OF BIODIESEL METALWORKING FLUID
Application Number	:	200801532-3
Date of Filing	:	21 February 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	28 March 2013

Dated this 28th day of March 2013

Tan Yih San
Registrar of Patents
Singapore

Inventor and Patent Owner of "Composition and Method of Manufacture of Biodiesel Metalworking Fluid".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 159413 has been granted in respect of an invention having the following particulars:

Title	:	AN IMPERCEPTIBLE CONCEPT/METHODOLOGY OF THE CONVERSION OF BIODIESEL INTO A RANGE OF CLEANING, EMULSIFYING AND DEGREASING AGENTS BY BLENDING A SYNERGISTIC BLEND OF CHEMICALS WITH BIODIESEL.
Application Number	:	200806295-2
Date of Filing	:	22 August 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	15 August 2012

Dated this 15th day of August 2012.

Tan Yih San
Registrar of Patents
Singapore

Inventor and Patent Owner of "An Imperceptible Concept/Methodology of Conversion of Biodiesel into a range of Cleaning, Emulsifying and Degreasing Agents by blending a synergistic blend of Chemicals with Biodiesel".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 158774 has been granted in respect of an invention having the following particulars:

Title	:	A CLEANING METHOD AND PROCEDURES FOR CLEANING CONTINOUS DIGESTER OF PULP & PAPER
Application Number	:	200805577-4
Date of Filing	:	23 July 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	31 December 2010

Dated this 31st day of December 2010.

Liew Woon Yin (Ms)
Registrar of Patents
Singapore

Inventor and Patent Owner of "A Cleaning Method and Procedures of Cleaning Continuous Digester of Pulp & paper".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 153707 has been granted in respect of an invention having the following particulars:

Title	:	A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON,RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.
Application Number	:	200719154-7
Date of Filing	:	31 December 2007
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL # 03-01 GRANDHILL SINGAPORE 118860
Date of Grant	:	14 January 2011

Dated this 14th day of January 2011.

Danielle Yeow Pin Lin (Ms)
Deputy Registrar of Patents
Singapore

Inventor and Patent Owner of "A Cleaning Method and Apparatus for Removing oil, Grease, Carbon, Rust and Combustion Ammunition Residue from Barrels of Artillery Gun, Battle Tank and Firearm".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 157245 has been granted in respect of an invention having the following particulars:

Title	:	AN INTERNAL GUN BORE SURFACE SCANNER FOR INSPECTING AND RECORDING THE BORE CONDITION OF THE HOWITZER, MAIN BATTLE TANKS AND GUN BARREL WITH DIAMETER FROM 76 MM TO 240MM.
Application Number	:	200803946-3
Date of Filing	:	23 May 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	14 January 2011

Dated this 14th day of January 2011.

Danielle Yeow Pin Lin (Ms)
Deputy Registrar of Patents
Singapore

Inventor and Patent Owner of " An Internal Gun Bore Surface Scanner For Inspecting and Recording the Bore Condition of the Howitzer, Main Battle Tanks and Gin Barrel with Diameter from 76mm to 240mm".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 159428 has been granted in respect of an invention having the following particulars:

Title	:	VCI (VAPOR CORROSION INHIBITOR) PRESERVATION METHODOLOGY OF ARMORED VEHICLES, BATTLE TANKS, AND TRANSPORT VEHICLES OVER CYCLES OF TWO YEARS.
Application Number	:	200806879-2
Date of Filing	:	02 September 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	15 December 2011

Dated this 15th day of December 2011.

Tan Yih San
Registrar of Patents
Singapore

Inventor and Patent Owner of "VCI (Vapour Corrosion Inhibitor) Preservation Methodology of Armoured Vehicles, Battle Tanks, and Transport Vehicles over Cycles of Two Years".

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 160259 has been granted in respect of an invention having the following particulars:

Title	:	VCI (VAPOR CORROSION INHIBITOR) PRESERVATION METHODOLOGY OF 105MM, 120 MM,155 MM, 240 MM AND 8 INCH SELF-PROPELLED AND TOWED HOWITZER GUNS OVER CYCLES OF TWO YEARS.
Application Number	:	200807395-9
Date of Filing	:	06 October 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 115860
Date of Grant	:	15 November 2011

Dated this 15th day of November 2011.

Ian Yih San
Registrar of Patents
Singapore

Inventor and Patent Owner of "VCI (Vapour Corrosion Inhibitor) Preservation Methodology of 105MM,120MM, 155MM, 240MM, and 8 Inch Self-Propelled and Towed Howitzer Guns over the Cycles of Two Years".

中 華 民 國 專 利 證 書

發明第 I 432695 號

發 明 名 稱：裝甲車輛、坦克、及運輸車輛超過二年週期之氣化防銹劑維持方法

專 利 權 人：鄭基耀

發 明 人：鄭基耀

專利權期間：自 2014年 4 月 1 日至 2028年 9 月 10 日止

上開發明業經專利權人依專利法之規定取得專利權

經濟部智慧財產局
局 長 王美花

注意：專利權人未依法繳納年費者，其專利權自原繳費期限屆滿後消滅。

中 華 民 國 103 年 4 月 1 日

Patent Owner of Taiwan Invention No. I 432695

Certificate of Patent of Republic of China

Invention Patent No. I432695

Title of Invention Patent: VCI (Vapor Corrosion Inhibitor) Preservation Methodology of Armored Vehicles, Battle Tanks, and Transport Vehicles Over Cycles of Two Years

Patentee: CHENG, KIT YEW 新加坡 SG

Inventor(s): CHENG, KIT YEW

Duration Term of Patent: **From:** **April 1, 2014**
To: **September 10, 2028**

Pursuant to the Patent Law, the patentee is entitled to grant the patent right.

Intellectual Property Office
Ministry of Economic Affairs
Director General

Issuance Date: **April 1, 2014**

(Note 1: The patent right will lapse, if patentee does not pay the maintenance fee before the dead line. – **March 31** annually thereafter)

Patent Owner of Taiwan Invention No. I432695

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

PCT

(43) International Publication Date
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C10L 1/18 (2006.01) *C11C 3/02* (2006.01)
C10M 105/32 (2006.01)

(21) International Application Number:
PCT/SG2008/000121

(22) International Filing Date: 14 April 2008 (14.04.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
200800305-5 11 January 2008 (11.01.2008) SG

(71) Applicant and
(72) Inventor: CHENG, Kit Yew [SG/SG]; Block 5 14-101, Normanton Park, Singapore 119002 (SG)

(81) Designated States *(unless otherwise indicated for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

(84) Designated States *(unless otherwise indicated for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

Published:
— *with international search report*

(54) Title: COMPOSITION AND PROCESS OF MANUFACTURING BIODIESEL GREASE BY GELLING BIODIESEL, ANTI-WEAR ADDITIVES, EXTREME PRESSURE ADDITIVES, WATER REPELLENT ADDITIVES AND ANTI-OXIDANT ADDITIVES

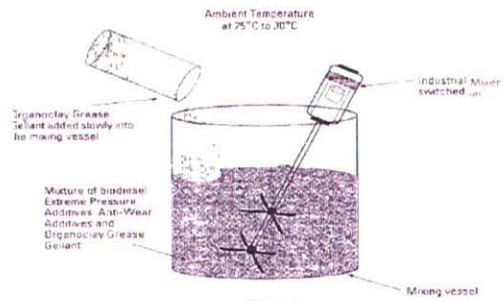


Figure 4

(57) Abstract: The invention relates to composition and process of manufacturing biodiesel grease by gelling biodiesel, anti-wear additives, extreme pressure additives, water repellent additives and anti-oxidant additives

WO 2009/088360 A1

Inventor and Patent Global Owner of "Composition and Process of Manufacturing Biodiesel Grease by Gelling Biodiesel, Ant-Wear Additives, Extreme Pressure Additives, Water Repellent Additives and Anti-Oxidant Additives.

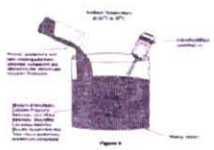
1. (WO2009105034) COMPOSITION AND METHOD OF MANUFACTURE OF BIODIESEL METALWORKING FLUID

Latest bibliographic data on file with the International Bureau PermaLink

Pub. No.: WO/2009/105034 **International Application No.:** PCT/SG2008/000114
Publication Date: 27.08.2009 **International Filing Date:** 10.04.2008
IPC:
C10L 1/18 (2006.01), ***C10M 105/32*** (2006.01), ***C11C 3/02*** (2006.01)

Applicants: **CHENG, Kit Yew** [SG/SG]; (SG)
Inventors: **CHENG, Kit Yew**; (SG)
Priority Data: 200801532-3 21.02.2008 SG
Title **(EN)** COMPOSITION AND METHOD OF MANUFACTURE OF BIODIESEL METALWORKING FLUID
(FR) COMPOSITION ET PROCÉDÉ DE FABRICATION D'UN FLUIDE À BASE DE BIODIESEL POUR LE TRAVAIL DES MÉTAUX

Abstract:
(EN) The invention relates to composition and method of manufacture High Load Carrying Capabilities Biodiesel Metalworking Fluids.
(FR) L'invention concerne une composition et un procédé de fabrication de fluides à base de biodiesel pour le travail des métaux ayant des capacités de transport de charge élevées.



Designated States: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
African Regional Intellectual Property Org. (ARIPO) (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW)
Eurasian Patent Organization (EAPO) (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM)
European Patent Office (EPO) (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR)
African Intellectual Property Organization (OAPI) (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Publication Language: English (EN)
Filing Language: English (EN)

Inventor and Global Patent Owner of Composition and Method of Manufacturing of Biodiesel Metalworking Fluid.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 July 2009 (09.07.2009)

PCT

(10) International Publication Number
WO 2009/085013 A1

(51) International Patent Classification:
F41A 29/00 (2006.01) *F41A 29/02* (2006.01)

(21) International Application Number:
PCT/SG2008/000016

(22) International Filing Date: 15 January 2008 (15.01.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
200719154-7 31 December 2007 (31.12.2007) SG

(71) Applicant and
(72) Inventor: **CHENG KIT YEW** [SG/SG]; Block 5#14-101 Normanton Park, Singapore 119002 (SG).

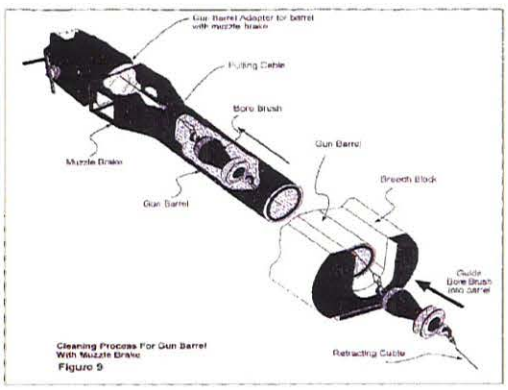
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

Published:
— *with international search report*

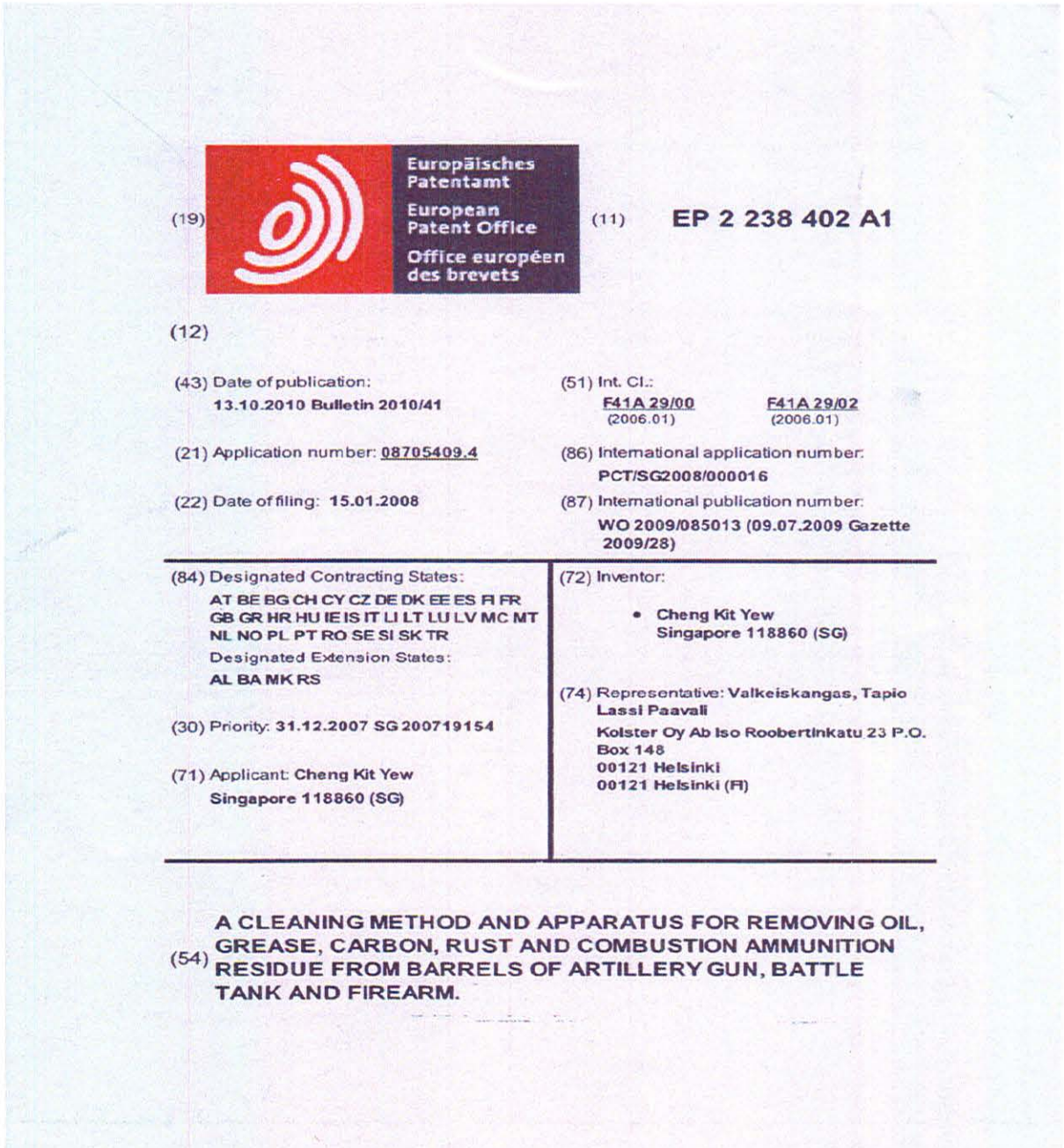
(54) **Title:** A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON, RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.



(57) **Abstract:** The invention relates to a method and apparatus for cleaning gun barrels with or without muzzle brake of firearm, artillery and battle tank, whereby cleaning fluid, bore brush and a winch is used to remove carbon, grease, oil, rust and combustion ammunition residue from the barrel.

WO 2009/085013 A1

Inventor and Patent Global Owner of " A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Ammunition Residue from Barrels of Artillery Gun, Battle Tank and Firearm.



(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 238 402 A1**

(12)

(43) Date of publication:
13.10.2010 Bulletin 2010/41

(51) Int. Cl.:
F41A 29/00 (2006.01) F41A 29/02 (2006.01)

(21) Application number: 08705409.4

(86) International application number:
PCT/SG2008/000016

(22) Date of filing: **15.01.2008**

(87) International publication number:
WO 2009/085013 (09.07.2009 Gazette 2009/28)

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(30) Priority: **31.12.2007 SG 200719154**

(71) Applicant: **Cheng Kit Yew**
Singapore 118860 (SG)

(72) Inventor:
- **Cheng Kit Yew**
Singapore 118860 (SG)

(74) Representative: **Valkeiskangas, Tapio Lassi Paavali**
Kolster Oy Ab Iso Roobertinkatu 23 P.O. Box 148
00121 Helsinki
00121 Helsinki (FI)

(54) **A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON, RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.**

Patent Owner of the European Union for "Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Residue from Barrels of Artillery Gun, Main Battle Tank and Firearm"

WOOD & WU
Patent and Trademark Office
兆里國際專利商標事務所

9F.No.102,Dunhua N.Rd.,Taipei,105 Taiwan R.O.C.
TEL:(866-2)27174088 FAX:(886-2)27174099
wnw@woodwu.com.tw email@woodwu.com.tw
www.woodwu.com.tw

CONFIRMATION COPY

May 15, 2013

Mr. Kit Yew Cheng
No.39 Pasir Panjang Hill, #03-01,
Singapore 118860

Via Facsimile, Total pages: 1
Fax No.: 65-6785-1497
Confirmation by Airmail

RE: Taiwanese Patent Application No. 97142791
VCI (Vapor Corrosion Inhibitor) Preservation Methodology of 105 MM, 120MM, 155MM, 240MM and 8 Inch Self-propelled and Towed Howitzer Guns Over Cycles of Two Years
Our Ref.: PJ007/7548TW

Dear Mr. Cheng,

Thank you for your e-mail of March 26, 2013. In accordance with your instructions, we have submitted an Argument and Amendment for Re-Examination in the Taiwan IPO on May 10, 2013.

By confirmation copy of this letter, please find the following documents as filed for your information and retention:

1. Official receipt for Re-examination;
2. Official receipt for the sum of the claims is over 10 items;
3. Application forms for Re-examination;
4. Petition for submitting the Argument for Re-Examination, Amendment petition, and Amended claims.

We will, of course, forward the next Taiwan IPO communication to you as soon as we receive it. Please do not hesitate to contact us if you have any queries concerning this matter.

Very truly yours,

Ted J. T. Su

TS/my
Enclosures

WOOD & WU
Patent and Trademark Office
兆里國際專利商標事務所

台北市105敦化北路102號9樓
9F, No. 102, Dunhua N. Rd., Taipei, 105 Taiwan R.O.C.
(886-2)27174088 FAX: (886-2)27174099
e-mail@woodwu.com.tw www.woodwu.com.tw

CONFIRMATION COPY

Mr. Kit Yew Cheng
No.39 Pasir Panjang Hill, #03-01,
Singapore 118860

February 6, 2012
Via Facsimile, Total pages: 1
Fax No.: 65-6785-1497
Confirmation by Airmail

RE: Taiwanese Patent Application 97122209
A Cleaning Method and Apparatus for Removing Oil, Grease, Carbon, Rust and Combustion Ammunition Residue from Barrels of Artillery Gun, Battle Tank and Firearm
Our Ref.: PI903/7548TW

Dear Mr. Cheng,

Thank you for your e-mail and of December 2, 2011. In accordance with your instructions, we have prepared and timely filed an Amendment and Response to the outstanding Office Action in the Taiwan IPO on December 20, 2011.

The claims have been amended as proposed and instructed in your letter. By confirmation copy of this letter, please find the following documents as filed for your information and retention:

1. Amendment petition in Chinese;
2. Amended claims in Chinese; and
3. Response in Chinese.

We are taking the liberty of enclosing our debit note for services rendered and expenses incurred in this connection, for your kind attention.

We will, of course, forward the next Taiwan IPO communication to you as soon as we receive it. In the meantime, please do contact us if you have any comments or queries concerning this matter.

Very truly yours,

Ted J. T. Su

TS/kl
Enclosures

Intellectual Property Office of Singapore
51 Bras Basah Road #04-01
Manulife Centre Singapore 189554
Tel: (65) 63398616 (General) Fax: (65) 63390252
(Patents) Fax: (65) 63399230
http://www.ipos.gov.sg

29 July 2013

Your Reference: -
Our Reference: PCT/SG2013/000306

CHENG KIT YEW
78 CHWEE CHIAN ROAD
SINGAPORE 117652

Dear Sir,

PCT International Application Number: **PCT/SG2013/000306**
Title of Invention: **CHEMICAL COMPOSITION OF A LOW-MAMMALIAN TOXICITY INSECTICIDE**
Applicant(s): **CHENG KIT YEW**

National Security Clearance under Section 34 of the Patents Act

We refer to your PCT International Patent Application that was filed with the Registry on 23 July 2013.

The person(s) [resident(s) in Singapore] mentioned above in relation to the said patent application may proceed (if desired) to file or cause to be filed patent application(s) in respect of the same invention outside Singapore, as from the date of this letter.

Thank you.

Yours faithfully,

Serene Ng Su Lin (Ms)
ASSISTANT REGISTRAR
for REGISTRAR OF PATENTS
SINGAPORE

IPOS
INTELLECTUAL PROPERTY
OFFICE OF SINGAPORE

Intellectual Property Office of Singapore
51 Bras Basah Road #04-01
Manulife Centre Singapore 189554
Tel: (65) 63398616 (General) Fax: (65) 63390252
(Patents) Fax: (65) 63399230
http://www.ipos.gov.sg

RF 201

In Reply Please Quote Our Reference

Your Ref	:	MAGNA LEGIONELLA-X
Our Ref	:	2012028106/120703/TMHAS/4980
Date	:	03/07/2012
Writer's Direct Line	:	63302751

CHENG KIT YEW
39 PASIR PANJANG HILL
#03-01 THE GRANDHILL
SINGAPORE 118860

Dear Sir,

Singapore Patent Application No.: 201202810-6
Title of invention: FORMULATION AND CHEMICAL COMPOSITION OF A HIGH EFFICACY DISINFECTANT AGAINST AVIAN INFLUENZA H5N1 VIRUS.
Applicant(s): CHENG KIT YEW

FORMALITIES EXAMINATION REPORT

The application has been examined in accordance with Section 28 of the Patents Act (Cap.221). We are pleased to inform you that the application satisfies the formal requirements of the Patents Act and Rules.

If you have not filed the necessary request for search or search and examination, or furnished prescribed information, please be reminded that you have to do so within the time periods specified in the Patents Act and Rules.

If you intend to rely on a corresponding application/corresponding international application as prescribed information to meet the requirements for the grant of a patent under Section 30 of the Patents Act, please note that under section 30(3)(c), each claim in the Singapore application must be related to at least one claim set out in the prescribed information which has been examined to determine whether the claim appears to satisfy the criteria of novelty, inventive step (or non-obviousness) and industrial applicability (or utility).

We would advise, in the interest of applicants, that care should be taken to ensure this particular requirement of section 30(3)(c) is met even where reliance is placed on prescribed information emanating from any of the prescribed patent offices under rule 41 of the Patents Rules.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully,

HASLINDA MASUD
for REGISTRAR OF PATENTS
SINGAPORE

N A M S A

AGENCE OTAN D'ENTRETIEN ET D'APPROVISIONNEMENT
NATO MAINTENANCE AND SUPPLY AGENCY

To whom it may concern

We herby certify, that the Part numbers as laid out in attached sheet,
(VAPPRO..... MAGNA...) from the manufacturer with the
NATO Commercial and Government Entity Code (NCAGE)
Q3005,

MAGNA INTERNATIONAL PTE LTD
BLK 9005 TAMPINES STREET 93
#02-242 TAMPINES INDUSTRIAL PARK A
SINGAPORE 528839
TEL: 65-6788-1228
FAX: 65-6785-1497

respond to the described **NATO Stock Numbers** (NSN),
and are part of the
NATO Master Cross Reference List database,
the NATO Catalogue of Materiel.
The NATO Stock Numbers have been assigned by the
Singapore National Codification Bureau (NCB),
a full member of the **NATO Allied Committee on Codification** (AC/135)
and are according to NATO rules as laid out in the
Allied codification Procedure No. 1 (AcodP1)
At this point Q3005 is the sole reference for the assigned NATO Stock Numbers.

N.A.M.S.A. NATO COOPERATIVE LOGISTICS

Torsten Schueler
Chief, Int. Codification
NATO Codification Management

1 3 JUIL. 2006

More than 200 invented products are listed in the NATO MCRL (Master Cross Reference List) with individual product assigned with NATO Stock Number.

N A M S A

AGENCE OTAN D'ENTRETIEN ET D'APPROVISIONNEMENT
NATO MAINTENANCE AND SUPPLY AGENCY

NCAGE	Reference number	NATO Stock Number	Remarks
Q3005	MAGNA 1120	6850320768129	
Q3005	MAGNA 702	6850320763552	
Q3005	VAPPRO 05	6850320761191	
Q3005	VAPPRO 10	6850320761187	
Q3005	VAPPRO 600	6850320761161	
Q3005	VAPPRO 800	6850320761080	
Q3005	VAPPRO 804	6850320761614	
Q3005	VAPPRO 818	9150320761140	
Q3005	VAPPRO 819	6850320768150	
Q3005	VAPPRO 820 PAK	6850320761162	
Q3005	VAPPRO 825	6850320761616	
Q3005	VAPPRO 826	6850320761091	
Q3005	VAPPRO 827	6850320761092	
Q3005	VAPPRO 828	6850320761603	
Q3005	VAPPRO 838	6850320761096	
Q3005	VAPPRO 839	6850320761617	
Q3005	VAPPRO 848	6850320761099	
Q3005	VAPPRO 850	6850320761100	
Q3005	VAPPRO 851	6850320761132	
Q3005	VAPPRO 852	6850320763553	
Q3005	VAPPRO 868	6850320761109	
Q3005	VAPPRO 869	9150320761117	
Q3005	VAPPRO 870	6850320761186	
Q3005	VAPPRO 872	9150320761604	
Q3005	VAPPRO 873	6850320761127	
Q3005	VAPPRO 874	6850320763546	
Q3005	VAPPRO 875 OGL	9150320768183	40l
Q3005	VAPPRO 875 OGL	9150320768133	20l
Q3005	VAPPRO 887 MAGTAN	6850320761181	
Q3005	VAPPRO 888	6850320761163	
Q3005	VAPPRO 890	6850320761190	
Q3005	VAPPRO 899	6850320761639	
Q3005	VAPPRO 900	6850320761639	
Q3005	VAPPRO 999	8030320761179	
Q3005	VAPPRO ASF	7510320761619	
Q3005	VAPPRO FUNGI EXOGEN	6850320761605	
Q3005	VAPPRO MAGNA 119	6850320763534	
Q3005	VAPPRO MAGNA GL	9150320761171	
Q3005	VAPPRO SEAL	7690320761189	
Q3005	VAPPRO TABLETS	6850320761618	
Q3005	VAPPRO TSP	6850320763545	

Torsten Schüeler
Chief, Int. Codification

N.A.M.S.A. NATO COOPERATIVE LOGISTICS

16 JUIL. 2002

Inventions Milestone Achievements

REKOR DUNIA
(WORLD RECORD)

(CHARTERED AWARD)
PIAGAM PENGHARGAAN
MUSEUM REKOR-DUNIA
(INDONESIA WORLD RECORD MUSEUM)
INDONESIA
No. 5407/R.MURI/IV/2012
Dianugrahkan Kepada (AWARDED TO)
PT. Magna Indonesia
(LUPROMAX)
ATAS REKOR (ON RECORD)
Ketahanan Mobil dan Motor
(RESILIENCE OF MOTOR CAR AND MOTORCYCLE)
Berjalan tanpa Pelumas terlama
(LONGEST RUN WITHOUT LUBRICATION)
(MOTOR CAR) Mobil : 283.8 Km - 8 Jam 5 Menit (8 HOURS 5 MINUTES)
(MOTORCYCLE) Motor : 242.8 Km - 8 Jam 10 Menit (8 HOURS 10 MINUTES)
Semarang, 29 April 2012
JAYA SUPRANA

Inventor of Lupromax EA engine oil additive that has entered the Indonesia World Record Museum for running a car and motorcycle without any lubricant for 280 kilo meters and 8 hours after treatment with said additive. *(see attached certificate from Indonesia World Record Museum).*

AUTOMOTIVE PERFORMANCE ENHANCING PRODUCTS
LUPROMAX®
NEWSLETTER
HAT HEAT ACTIVATED TECHNOLOGY
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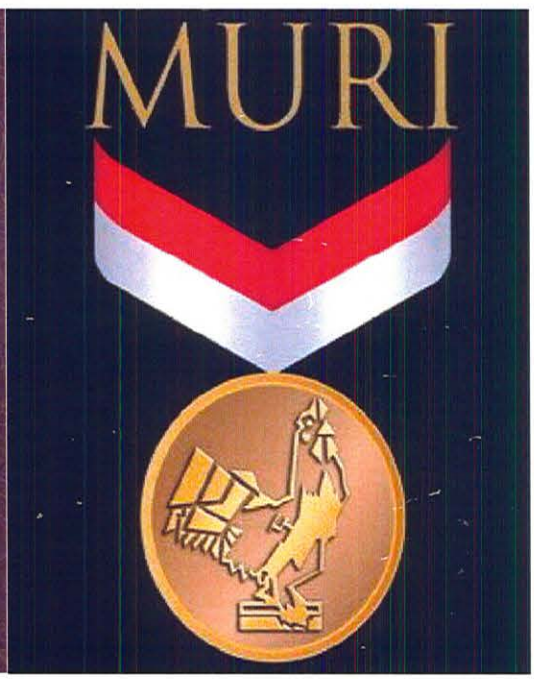
www.facebook.com/LupromaxInternational
ISSUE 01 APRIL 13

Lupromax Sets World Record in MURI (Indonesia World Records Museum)



The Indonesia World Records Museum or MURI, its Indonesian acronym, is a unique museum founded by Jaya Suprana as a means of inspiring young Indonesians to excellence in their field of endeavor. Unlike the Guiness Book of World Records, the MURI Museum, recognizes only those in Indonesia who have attained World Record achievement in their field of expertise.

Since its beginning in 1990, the museum has given the MURI Award to the superlative of achievement in Indonesia s biggest, best, rarest and most unusual. In its 23 years of existence, MURI has honored more than 5,000 who have showed the world that the best can be found in Indonesia.

Magna's Lupromax distributor for Indonesia, Ruby Wijaja received the prestigious MURI Award for his test performance of Lupromax- EA oil additive in April 2012. The award was given in the category for Motor Cars and Motorcycles. The award itself is for the "Longest Run Without Lubricant" lasting more than 8 hours.

The test was arranged to take place on April 29, 2012 at Tangerang for the purpose of demonstrating to the automotive community that Lupromax has superb lubrication properties and to validate the functionality of "HAT"**(Heat Activated Technology)**. We also wanted to prove publicly, the quality of Lupromax products through setting the MURI world record for "Running cars and motorcycles without oil."The recognition gained through this grueling test of machinery and technological advancements in lubricant research would awaken the public to alternative solutions regarding lubricant enhancement products and prove to the world that Lupromax-EA is the best on the market.

The method of the test was to add Lupromax-EA to the engine oil of an automobile and a motorcycle. After it was thoroughly mixed in each vehicle by running its engine, the oil was then completely drained from the engines. The vehicles were then driven round Bumi Serpong Damai(BSD) Square in Tangerang to see how long they could go until their engines seized from lack of sufficient lubricant.

This grueling test Lupromax-EA lasted 8 hours and 5 minutes for the car, covering 283 km. The motorcycle test lasted 8 hours and 10 minutes covering 242 km. The only reason they stopped was because the drivers were exhausted and it was enough to prove to the world that Lupromax EA fulfilled its performance claims of being the best lubricant additive on the market. This test proved to the Muri Museum that Lupromax is indeed a world class engine lubricant that enabled the auto and motorcycle to set a world record for running without oil. The award was given at their monthly ceremony in Jakarta, Indonesia to PT Magna, Indonesia for Lupromax and its world record setting achievement.

Lupromax-EA and the other items in their product line are destined to become a household name and people s first choice in lubricant enhancing additives.

Test Report of Magna Legionella-X against Avian Influenza H5N1 Virus

Division of Pathology
Faculty of Veterinary Medicine
Bogor Agricultural University
2008

Inventor of Legionella-X Deactivates 100% of H5N1 Avian Flu Virus

Examination Report of Efficacy Magna Legionella-X
To Avian Influenza Virus H5N1

Composition of Magna Legionella-X

Twin-chain quaternary ammonium

Indication

Magna Legionella-X effectively kill bacterium, fungal, and virus including Avian Influenza virus H5N1

Dose and administration

Directly spraying or fogging with dilution in distilled water (1:1)

Produced by	: Magna International Pte Ltd
	Blk 9005 Tampines street 93, #02-242
	Tampines Indutrial Park A, Singapore 528839
Place test	: Division of Pathology
	Department of Clinic, Reproduction and Pathology
	Faculty of Veterinary Medicine, Bogor Agricultural University
Time	: March 2008
Responsible Person of Test	: Agus Setiyono DVM, MS, PhD

Bogor, March 24th 2008
Responsible Person of Test

Agus Setiyono DVM, MS, PhD
NIP. 131 760 847

Examinator of Test

Abadi Sutisna DVM, MSi
NIP. 130 422 700

Approved by
Dean, Faculty of Veterinary Medicine
Bogor Agricultural University

Dr. I Wayan Teguh Wibawan DVM, MS
NIP. 131 129 900

Test Report of Magna Legionella-X against Avian Influenza H5N1 Virus

1.1 Purpose

The purpose of the test is to ascertain the efficacy of Magna Legionella-X against Avian Influenza H5N1 virus.

1.2 Observation Parameter

The test parameter is based on the observation of the percentage of death virus after the introduction of Magna Legionella-X disinfectant.

2. Test Method

Using Isolated AI H5N1 virus from Tasikmalaya 2005, collected from Microbiology Department of Faculty of Veterinary Medicine, Bogor Agricultural University (IPB). The test was done in the unit of the Integrated Services of Medical Microbiology, Faculty of Veterinary Medicine, IPB. Five live egg embryos Specific Pathogen Free (SPF) were used as medium for the test.

Test Procedure

Three components were used: AI H5N1 Virus, Live Egg Embryos and Magna Legionella-X 100% concentration. The preparation of the disinfectant solution was done by diluting 1 part of Legionella-X to 1 part distilled water by weight. Subsequently, 2 ml of AI H5N1 Virus (10^{-9} EID_{50}) was introduced into the solution of Legionella-X and then the mixture was incubated for 15 minutes at 37°C. 0.2 ml of said mixture was then injected into 11 days old live embryo via allantois and kept in the incubator at 37°C, observation was then carried out daily till the death of embryo. The liquid of the allantois was taken out for rapid test HA/HI using AI standard serum.

1

3. Results

Based on observation all the embryos died two days after the injection Magna Legionella-X and H5N1 mixture. The liquid from the allantois of the death embryo was then taken for rapid test HA/HI using AI standard serum. The results as tabulated below:

Table1. The Efficacy Result of Magna Legionella-X against AI H5N1 Virus

Concentration	Dilution	Percentage of Inactive Virus AI H5N1 (%)
100	1:1	100

Based on Table 1. Magna Legionella-X with the dilution of 1: 1 has the ability to inactivate 100% of AI H5N1 virus. The test shown that Magna Legionella-X at a dilution ratio of 1:1 is highly effective against said virus.

4. Conclusion

Based on the said efficacy test of Magna Legionella-X against Avian Influenza AI H5N1 Virus, the said disinfectant is effective to inactivate 100 %AI H5N1 Virus at concentration with a dilution 1:1

5. Reference

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Tjay, T.H. Raharja, K.2000. Obat-Obat Penting. Depkes R.I. Gramedia.Jakarta.

Vappro VCI preservation procedure for military equipment has been endorsed and accepted by the Singapore Armed Forces, Taiwan Armed Forces, Malaysia Armed Forces and UAE Armed Forces. *(see newsletters)*

Magna Newsletter

ISO 9001 Certificate No. : AIA00 2706

ISSUE 17 www.magnachem.com.sg DEC 2004

TAIWAN ARMED FORCES EMBARKED ON VAPPRO PRESERVATION PRACTITIONER CERTIFICATION

On the cool autumn morning of 11 October 2004, the Taiwan Armed Forces embarked on the Vapprotisation of their Armoured Personnel Carriers in a big way. This successful embarkation is the result of 5 years of discussions, data comparisons and successful 2-year trial preservation.

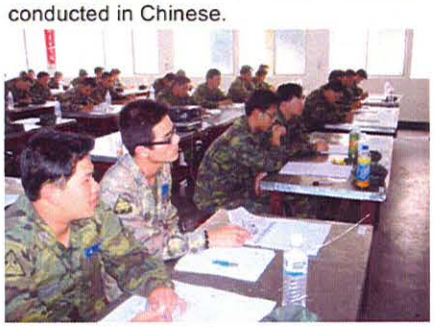
The Training and Preservation is conducted by Magna International Pte Ltd, which provides a comprehensive Preservation Management Program using a series of patented Vappro VCI products.

Training Location: Taiwan Armed Forces 542 Armoured Brigade.

Trainees listening attentively.

The Vapprotisation process in Taiwan began with 60 selected military personnel of the 542 Armoured Brigade undergoing a 2-day training session of the Vappro Preservation System Certification Course conducted in Chinese.

Explaining the Vappro Concept.



Full attention from trainees.

Well Trained Practitioners Ensure Successful Mobilisation

Various products and techniques of corrosion prevention were explained.

Trainee participated in Q & A Session.

The trainees were very quick learners, poring over their notes in intense self-study before taking the Certification Test. They were very keen and more than half of them scored above 90% in the Certification Test. All who passed were issued a Certified Vappro Practitioner Identification Card and a VPS Certificate of Competency. This identification is key to enhanced operational readiness of military vehicles.

Intense self-study before taking the Certification Test.

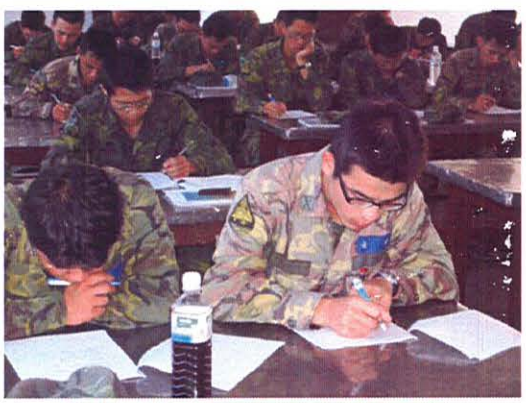
Lively interactive participation and dialogue contributed to active learning.

Certified Vappro Practitioner Identification Card.

Examination in progress.

Objective of Vappro Certification Course

Magna International Pte Ltd believes in assuring quality control of equipment preservation. Since well-preserved equipment begins with knowledgeable staff, this Course is designed to contribute to an increase in confidence in product identification and application and to the final objective of successful mobilisation.



Trainees in full concentration during examination.

Vappro Preservation System Training Manual listed on NATO MCRL

The Training Manual used for the VPS Certification Course is listed on the NATO Master Cross Reference List (MCRL) with its individual NATO Stock Number (NSN). By quoting the NSN, the Course is accessible at 19 NATO allied countries, 27 NATO sponsoring countries and 27 Partnership for Peace countries. The Vappro Certification Course provides military leaders with the solution and system necessary to link equipment to operational readiness.

Vappro Preservation Management Life Cycle

Col. (Ret) Tu sharing in the session.


VAPPRO

CERTIFICATE OF COMPETENCY

VAPPRO PRACTITIONER

This is to certify that

SPECIMEN

CHEE WENG KEONG

has successfully completed a course in Vappro Preservation Management Program on 21st June 2002 and is hereby awarded certificate of competency.

SPECIMEN

Mr. Derek Siok
BVPA
Principal Consultant
Magna International Pte Ltd

Associate Professor Gu Jian Hai
BEng, PhD, MIM, CEng, MICorr
Magna International
Advisory Committee

Vappro Practitioner Certificate.

Trainees celebrate their good results.

Group picture of Certified Vappro Practitioners.

At Magna, we are poised to handle tomorrow's challenges with agility, innovation and world-class military and commercial solutions. For a discussion, please contact Mr. Derek Siok or Mr. Nelson Cheng at Tel: (65) 6788-1228. Please fax your details to us at Fax: (65) 6785-1497. Email: magnaintl@pacific.net.sg. Alternatively you can contact Mr. James Cheng at Tel: (705) 273-3353, Fax: (705) 273-3352, Email: magna@ntl.sympatico.ca.

Name:
Rank/Designation:
Unit:
Address:
Tel:
Fax:
Email:

MAGNA INTERNATIONAL PTE LTD

MAGNA NEWSLETTER

RESTRICTED | NOVEMBER 2008 | ISSUE NO 5

MULTI-MILLION DOLLAR CONTRACT- VALIDATION OF TAIWAN'S CONFIDENCE IN VPS(VAPPRO PRESERVATION SYSTEM)

ANOTHER SUCCESSFUL COLLABORATION BETWEEN MAGNA INTERNATIONAL & THE TAIWAN ARMED FORCES

The Vappro Preservation System is now into the fourth year of a ten-year agreement with the Taiwanese Army.

In terms of absolute numbers, the quantum of equipment to be preserved has more than doubled compared to last year.

The reason for the spark in demand can be attributed to an increase in confidence in the proven Vappro Preservation System. Equipment mobilised at the close of the first year of preservation were found to be in pristine condition with no traces of corrosion when opened for inspection.

Magna International fulfilled the required preservation quota well within schedule, due to the highly efficient Vappro Preservation System, which requires only minimal manpower to achieve optimum efficacy.

The proven track record internationally plus the ability to deliver according to specifications are now translated into a larger multi-million contract involving a greater number of equipment.

The Taiwanese Army's inclusion of the Preservation of its Arsenal into the list, together with the Magna International's securing of the military contract, once again highlights the endorsement and faith placed in the Vappro Preservation System.

TRAINING

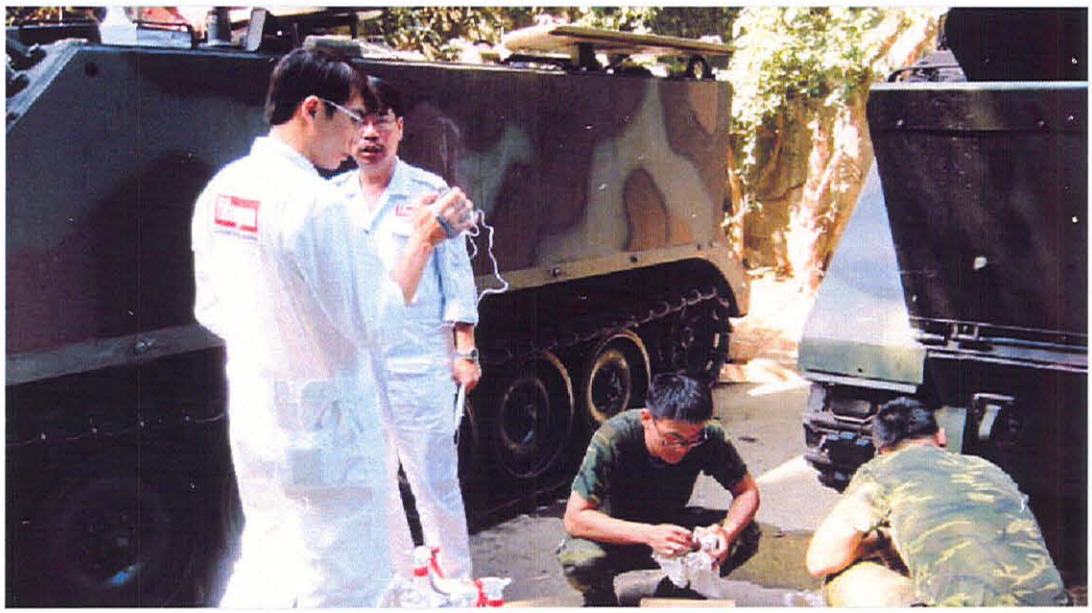
The Vappro Preservation System encompasses a comprehensive training programme especially tailored for officers and technicians, to fully equip them with the required expertise for the various processes and procedures of preservation. This training was an indispensable factor in achieving the success of the Vappro Preservation System.

In Taiwan, preparations began with the training of more than 100 officers, who in turn were in charge of a greater number of mechanics. These officers came from many different units and centres all over Taiwan, and were fully trained by Magna Preservation Consultants in a central location over a two-day period, before being despatched back to their units to oversee the preservation of equipment by their own mechanics there.

Officers are thoroughly coached in the methodology and processes of the entire preservation system through a series of theory and demonstration sessions designed to fully equip personnel with the necessary knowledge required.

Briefing on Vappro procedures with regards to armored vehicles

ACTIVE SUPPORT



The Taiwanese Army gave its full support at the maintenance zero point by thoroughly preparing the equipment. Vehicles to be preserved were given the requisite oil change and treated for inherent rust. The Army and defence contractor Magna International cooperated closely to ensure the adherence of the preservation process to the prescribed methodology and schedule.

ALL-WEATHER VAPPRO

The resilient Vappro Preservation System was made to undergo the ultimate test in typhoon-prone Taiwan over the entire preservation duration, after which it was shown to have withstood magnificently. At the end of the first year, equipment and vehicles treated by the Vappro system were found to have held up well against the ravages of the Taiwanese weather, with negligible or no deviation from their original condition. This is yet another reason for Vappro's strong endorsement from the Taiwanese Army.

SATISFIED WITH RESULTS

At the close of the training session, an Army General from HQ said, "We can testify that the Howitzers preserved in humid, salty island conditions last year remained in good conditions. We opened up the Vappro Guard protective wrap after so many months and found no corrosion at all. Normally our soldiers will use a brush to grease the Howitzers every two weeks. Vappro has effectively kept corrosion away and eliminated the tedious cleaning procedures we used to perform."

ENTHUSIASTIC RESPONSE

For thousands of soldiers, the response towards the Vappro Preservation System was filled with enthusiasm and relief. As the Army downsized and National Service shortened, being able to have their cleaning duties lightened was a great relief. Its effects are already showing in the greater focus on combat training rather than on maintenance duties.

ON SCHEDULE

Another advantage of the Vappro Preservation System was the ease of application. As all involved personnel had been thoroughly trained in the processes and methodology of preservation, teams of mechanics and technicians under the supervision of Magna International's Vappro Preservation consultants as well as trained officers were dispatched to the different centres and units where the preservation proceeded on schedule.

COST SAVINGS AND ENHANCED NATIONAL SECURITY

Given the huge losses that corrosion could generate, long-term savings on capital assets preserved under the Vappro Preservation System will have significant cost-saving impact. In addition to this, implementing the Vappro Preservation System will reduce operating costs in tandem. Without the need to fire up the engines of vehicles every few weeks, the Army also saves on fuel costs. Handling of preserved vehicles once in two years reduces touch points, greatly lowering possibilities of technical-related mishaps.

The combined benefit of these factors also serves to increase the availability of manpower for combatant and operational roles, instead of routine logistical tasks. This in turn will optimize the Army's total operational readiness, giving rise to enhanced national security.

RoHS COMPLIANCE

Magna is well aware of the importance of developing products which are both the finest performers in their respective fields and yet, at the same time, environmentally-friendly. The European Union (EU) Directive on Restriction of Hazardous Substances (RoHS) restricts the use of harmful substances which may be detrimental to the environment and consumers. Magna has ensured that our products meet the Directive.

Our Vapor Corrosion Inhibition (VCI) products have been submitted for testing and certified by Bureau Veritas, an established organization specialized in QHSE (quality, health, safety and environment) management and certification. Magna is pleased to inform all our current and potential customers that our products are free of any of the restricted substances stated in the Directive (2002/95/EC), as according to the results.

Any party concerned with RoHS can safely use Magna's VCI products to protect their equipment, be it in storage or in transit.

VAPPRO PRESERVATION PROGRAM

Touted as the world's best Preservation Program for Military Equipment, with a mobilisation success rate of more than 99% over a two-year time frame, Vappro is used extensively in corrosion prevention in the Asia Pacific Regions. It is also one of the most cost-effective methods for preservation of military equipment.

At Magna International, we are poised to handle tomorrow's challenges with agility, innovation and world-class military and commercial solutions.

For a discussion, please contact Mr. Nelson Cheng at Tel: (65) 6788-1228 or email at nelsoncheng@magnachem.com.sg. Please fax your details to us at Fax: (65) 6785-1497.

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Email magnaintl@pacific.net.sg
Website http://www.magnachem.com.sg

A member of NACE INTERNATIONAL

Inventor of Legionella-X Hospital Grade Disinfectant that kills 99.99992 percent of Legionella pneumophila bacteria. *(see attached PSB Test Report).*

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PSB Corporation

57S031505-SLE

Product: Magna Legionella-X

Test Microorganism: *Legionella pneumophila* (ATCC 33152)

Contact Time	Initial Count of Test Microorganism per ml of Test Mixture (Log_{10})	Count of Surviving Test Microorganism per ml (Log_{10})	Log Reduction	Percentage Kill of Test Microorganism
5 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992
30 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992
60 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992

Remarks

The product shall be deemed to have passed the test if it demonstrates a 10^5 log or more reduction in viability within 60 minutes or less under the conditions defined by this test when the test organisms are *Pseudomonas aeruginosa* and *Staphylococcus aureus*.

This test method evaluates the basic bactericidal activity of chemical disinfectants with no specific application. It does not evaluate the activity of a product for an intended use. More specific test methods are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

CHENG-SHAW LAY ENG (MRS)
TECHNICAL EXECUTIVE

KAM-LEONG YIN PHENG (MRS)
MICROBIOLOGIST
MICROBIOLOGY
TESTING GROUP

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 373/2/03 Date: 7 October 2003

REPORT
(This report is not to be used for advertising purposes)

on Disinfectant Solution

1 sample received from Magna International Pte Ltd

on 22 September 20 03 .

SAMPLE LABEL

One bottle of sample, capped and sealed, bearing the following commercial label,

" Magna-Legionella-X, 500 ml
Viral-Scrub
Pine Disinfectant Floor Cleaner

Magna-G12, Canada "

TEST METHOD

Modified Kelsey Sykes Capacity Test Option for Hospital Grade Disinfectant under dirty conditions. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant was tested at 1:100 dilutions using hard water (342 ppm Hardness) as diluent.

The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213: 528-230, (1974)). The disinfectant is tested at the use-dilution recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

Dr Charles Tang
Sr. Principal Scientific Officer
Pharmaceutical Microbiology Laboratory
Department of Pathology

Page 1 of 2

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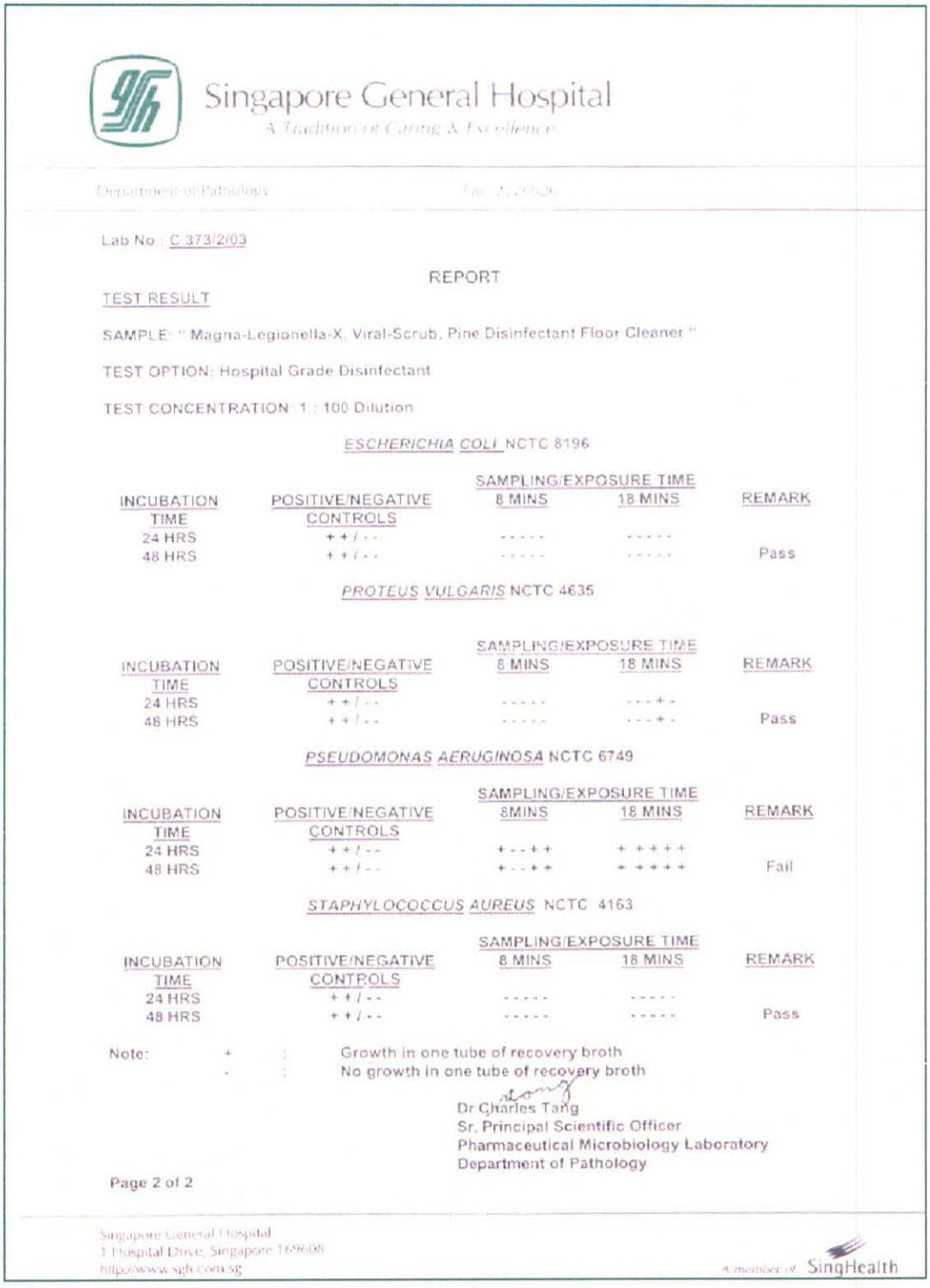

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology

Lab No : C 373/2/03

REPORT

TEST RESULT

SAMPLE: " Magna-Legionella-X, Viral-Scrub, Pine Disinfectant Floor Cleaner "

TEST OPTION: Hospital Grade Disinfectant

TEST CONCENTRATION: 1 : 100 Dilution

ESCHERICHIA COLI NCTC 8196

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

PROTEUS VULGARIS NCTC 4635

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - + -	
48 HRS	+ + / - -	- - - - -	- - - + -	Pass

PSEUDOMONAS AERUGINOSA NCTC 6749

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8MINS	18 MINS	REMARK
24 HRS	+ + / - -	+ - - + +	+ + + + +	
48 HRS	+ + / - -	+ - - + +	+ + + + +	Fail

STAPHYLOCOCCUS AUREUS NCTC 4163

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

Note: + : Growth in one tube of recovery broth
- : No growth in one tube of recovery broth

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Inventor of Viral Scrub hospital grade disinfectants that passed the U.K. Kelsey Skyes Test. *(see attached test reports).*

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 302/03 Date: 8 August 2003

REPORT
(This report is not to be used for advertising purposes)

on Disinfectant Spray

1 sample received from Magna International Pte Ltd

on 30 July 20 03 .

SAMPLE LABEL

One disinfectant sample in a spray bottle, capped, sealed and bearing the following commercial label,

" Magna-Legionella-X, 110ml
Viral-off
Waterless Hand Disinfectant

Magna-G12, Canada "

TEST METHOD

Modified Kelsey Sykes Capacity Test Option for Hospital Grade Disinfectant under dirty conditions. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant was tested neat.

The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213: 528-230, (1974)). The disinfectant is tested at the use-concentration recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

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Pharmaceutical Microbiology Laboratory
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Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 302/03

REPORT

TEST RESULT

SAMPLE: " Magna-Legionella-X, Viral-off Waterless Hand Disinfectant "

TEST OPTION: Hospital Grade Disinfectant

TEST CONCENTRATION: Neat

ESCHERICHIA COLI NCTC 8196

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

PROTEUS VULGARIS NCTC 4635

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

PSEUDOMONAS AERUGINOSA NCTC 6749

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

STAPHYLOCOCCUS AUREUS NCTC 4163

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ - / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

Note: + : Growth in one tube of recovery broth
- : No growth in one tube of recovery broth

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Page 2 of 2

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Department of Pathology Fax: 2226826

Lab No.: C 301/03 Date: 3 September 2003

REPORT
(This report is not to be used for advertising purposes)

on Anti-bacterial Hand Gel

1 sample received from Magna International Pte Ltd

on 30 July 20 03 .

SAMPLE LABEL

One sample in a dispenser bottle, capped, sealed and bearing the following commercial label,

" Magna-Legionella-X, 110ml
Viral-Rub
Anti-Bacterial Hand Gel
Magna-G12, Canada "

TEST METHOD

Modified Kelsey Sykes Capacity Test Option for Hospital Grade Disinfectant under dirty conditions. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant was tested neat.

The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213: 528-230, (1974)). The disinfectant is tested at the use-concentration recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

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A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 301/03

REPORT

TEST RESULT

SAMPLE: " Magna-Legionella-X, Viral-Rub Anti-Bacterial Hand Gel "

TEST OPTION: Hospital Grade Anti-bacterial Hand Gel

TEST CONCENTRATION: Neat

***ESCHERICHIA COLI* NCTC 8196**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

***PROTEUS VULGARIS* NCTC 4635**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

***PSEUDOMONAS AERUGINOSA* NCTC 6749**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

***STAPHYLOCOCCUS AUREUS* NCTC 4163**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - -	- - - -	
48 HRS	+ + / - -	- - - -	- - - -	Pass

Note: + : Growth in one tube of recovery broth
- : No growth in one tube of recovery broth

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Inventor of Viral Rub hospital grade disinfectants that passed the U.K. Kelsey Skyes Test. *(see attached test reports).*

USDA
United States Department of Agriculture

BioPreferred
www.biopreferred.gov

FOR IMMEDIATE RELEASE

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proffittm@osborn-barr.com

Magna International Pte Ltd Earns USDA Certified Biobased Product Label

Singapore, . (October 16, 2012) - Magna International Pte Ltd has earned the USDA Certified Biobased Product Label for its Biolubri-Greaskote 100. The USDA Certified Biobased Product Label verifies that the products amount of renewable biobased ingredients meets or exceeds prescribed USDA standards. Biobased products are goods composed in whole or in significant part of agricultural, forestry, or marine materials.

["Quote from company CEO or spokesperson about how he/she thinks the label helps inform consumers about the value of its product or products"].

All biobased amount claims are verified by independent labs and monitored by the USDA. Consumers may feel secure in the accuracy of the biobased amount and be empowered in making better informed purchasing decisions.

"We are pleased that Magna International Pte Ltd has earned the USDA Certified Biobased Product Label," said Ron Buckhalt, USDA BioPreferred Program Manager. "Biobased products provide opportunities to help add value to renewable commodities, create jobs in rural communities and generate investment income."

The label is estimated to be on certified products and available for consumers by [date]. The following is an example of the label:

MAGNA INTERNATIONAL PTE LTD

MAGNA NEWSLETTER

RESTRICTED | December 2012 | ISSUE NO 8

Magna International Pte Ltd Earns USDA Certified Biobased Product Label Singapore(October 16, 2012)

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"Being organically based, BioLubri lubricants are targeted to optimize efficiency and productivity of machinery and equipment, while being mindful of our planet. Adoption of bio-lubricants should be actively promoted to prevent the undesirable scenario of placing both land and waterways in jeopardy", said Mr.Nelson Cheng, President/CEO of Magna International. Mr. Nelson thinks the label helps inform consumers about the value of BioLubri products.

All biobased amount claims are verified by independent labs and monitored by the USDA. Consumers may feel secure in the accuracy of the biobased amount and be empowered in making better informed purchasing decisions.

"We are pleased that Magna International Pte Ltd has earned the USDA Certified Biobased Product Label," said Ron Buckhalt, USDA BioPreferred Program Manager. "Biobased products provide opportunities to help add value to renewable commodities; create jobs in rural communities and generate investment income."

The label is estimated to be on certified products and available for consumers by 1st January 2013. The following is an example of the label:

About USDA BioPreferred

The USDA BioPreferred program was created by the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), and expanded by the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill).

The purpose is to increase the purchase and use of biobased products. The United States Department of Agriculture manages the program. Products that meet the USDA BioPreferred program requirements carry a distinctive label for easier identification by the consumer. To learn more about the USDA Certified Biobased Product Label please visit www.biopreferred.gov, and follow on Twitter at http://twitter.com/BioPreferred.

2 USDA Certified Biobased Product Label

Our Belief

"In a cleaner, greener, better tomorrow, we manufacture environmentally friendly biodegradable chemical products."

About Magna International Pte Ltd

Magna International Pte Ltd, an innovative chemical company that manufactures specialty chemical products, was incorporated in September 1992. Our specialty chemical products are represented in 25 countries in the Asia Pacific Region and Europe.

The issue of environment protection and sustainable development has become more of an imperative on a global scale than before in recent years. Faced with the dual dilemmas of both shrinking resources coupled with expanding populations, the demand for environmentally-responsible commerce remains a top priority for industries and government alike.

In response to the need for greater industrial environmental responsibility, Magna International has expanded with the addition of a subsidiary division, Magna Energy, which specializes in research and development in organically-based cleaning agents, bio-lubricants, fuel additives and as well as harnessing solar energy.

One of the main driving forces behind industries is fuel, which poses a serious threat to the environment through the occurrence of accidents and also through the by-products produced from its various uses. Industrialization, since the turn of the 19th century, has brought about a major cause for concern with pollution caused by its heavy reliance on fuel, as well as the fact that fuel shortage is a likely scenario in the not too distant future.

Magna International recognizes the importance of remediating the toxic effects that petroleum derivatives have on our ecological capital, and has developed a range of bio-lubricants and cleaning agents specially designed for minimal impact on the environment, simultaneously without compromising on lubrication performance.

Being fully organically based, Magna's bio-lubricants are targeted to optimize efficiency and productivity of machinery and equipment, while being mindful of our planet. Adoption of bio-lubricants should be actively promoted to prevent the undesirable scenario of placing both land and waterways in jeopardy.

Magna

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Website http://www.magnachem.com.sg

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1450 Government Road West
Kirkland Lake, Ontario P2N 2E9
Canada
Tel 1.416 479 9151
Fax 1.888 317 1993
Email magna@vappro.com

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

INDUSTRY**CHALLENGES**

Cost of corrosion estimated to be S$11 billion or 4% of GDP in Singapore in 2013

Introduction

In Singapore the annual corrosion costs amount to more than 4% of GDP. Due to its widespread occurrence, corrosion affects almost industrial sectors. *(A*STAR- SMIT Singapore Institute of Manufacturing Technology- 19th June WORKSHOP ON CORROSION PERFORMANCE EVALUATION WITH FIELD AND LAB TESTING PROTOCOLS)*

A good understanding of the nature of corrosion together with proper prevention and packaging practices is imperative to save a significant percentage of corrosion costs.

Using the right packaging materials during shipment or storage of finished products by manufacturers in Singapore is of paramount importance to reduce the rejects due to corrosion.

Vappro 826 VCI film or bags was developed to protect both ferrous and non-ferrous metals against corrosion, exhaustive essential corrosion test capabilities have been carried out on said product which can benefit our local industries tremendously.

The massive costs of corrosion, the high salinity and humidity environmental conditions of Singapore leads Magna International Pte Ltd to research and developed a biodegradable Vapour Corrosion Inhibitor (VCI) film and bags to protect local produce against corrosion during shipment or storage.

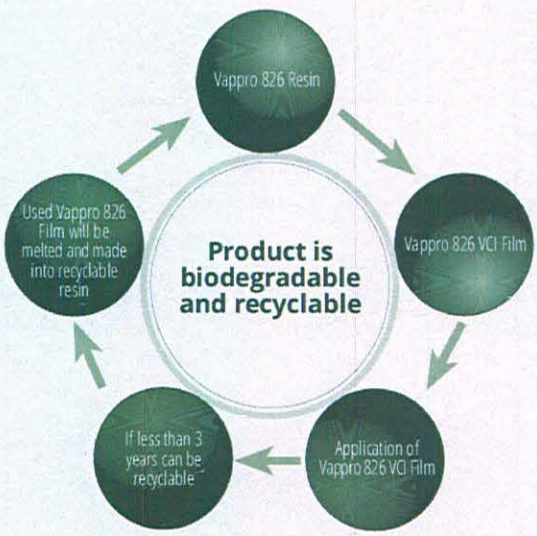
The said product helps our local, MNCs manufacturers, and suppliers to reduce corrosion costs and eliminate risks of failure of their products due to corrosion. The costs of corrosion vary considerably from industry to industry; however, substantial savings are achievable in most industries if the right packaging materials are used.

Inventor of Vappro 826 biodegradable VCI plastic film that won the Singapore Star and World Star Packaging Award *(see attached newsletter and Award Certificates).*

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

INDUSTRY CHALLENGES

Solving Corrosion Problems with the Environment in Mind



Product Description

Vappro 826 is a significant breakthrough in protective packaging technology. It offers a new concept in product protection without the need for rust preventative coatings or oils. It was developed to solve corrosion problems with the environment in mind.

Vappro 826 offers protection for aluminum alloys and copper while providing excellent protection for ferrous metals, steel, and stainless steel.

Vappro 826 does not change critical electrical or mechanical properties of electronic or electrical components.

It is fortified with proprietary amine carboxylate salts and is made from OXO Biodegradable plastic, it is a polyolefin plastic with some metal salts added to catalyze the natural degradation process and to speed it up so that the OXO plastic will degrade resulting in microfragments of plastic and metal salts which will remain in the environment but will not be seen as a visual contaminant.

The degradation process is shortened from hundreds of years to years and/or months for degradation and thereafter biodegradation depends on the micro-organisms in the environment.

RoHS Compliance

We at Magna are well aware of the importance of developing products which are both the finest performers in their respective fields and yet, at the same time, environmentally-friendly. The European Union (EU) Directive on Restriction of Hazardous Substances (RoHS) restricts the use of harmful substances which may be detrimental to the environment and consumers. Magna has ensured that our products meet the Directive. Our products have been submitted for testing and certified by Bureau Veritas, an established organization specialized in QHSE (quality, health, safety and environment) management and certification. Magna is pleased to inform all our current and potential customers that our products are free of any of the restricted substances stated in the Directive (2002/95/EC), as according to the results.

RoHS Compliant
RoHS COMPLIANT
EUROPEAN COMMUNITY DIRECTIVE 2002/95/EC

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

PRODUCT INFORMATION

Features & Benefits

- ☑ Environmental Friendly-Biodegradable.
- ☑ Heat sealable with standard equipment. However, bags or sheets can be tied, folded, taped or stapled for protection equivalent to a heat sealable enclosure.
- ☑ Does not have to be in contact with metal to protect, the vapours travel to all portions of the enclosure.
- ☑ Eliminates the need for expensive and messy greasing procedures.
  The film is transparent. Your product is visible at all times.
- ☑ Has no coating of chemicals to flake off, stick to or otherwise damage or soil products.
- ☑ Protects when used in conjunction with acid bearing packaging materials, e.g. corrugated board, chipboard, wood, etc.
- ☑ Rough handling does not impair chemical effectiveness.
- ☑ Inhibitors will not affect any electrical or mechanical properties of a packaged item.
- ☑ May be used with neutral or light rust preventative oils.
- ☑ No special handling is required.
- ☑ Available from stock in popular bag, sheeting and tubing sizes.
- ☑ Has a long life.
- ☑ Can be supplied in special sizes and forms to meet specific needs.
- ☑ Conforms to U.S Military Specifications: MIL-B-22019C
- ☑ Listed in NATO MCRL and NATO assigned Stock No.: 6850-32-076-1091

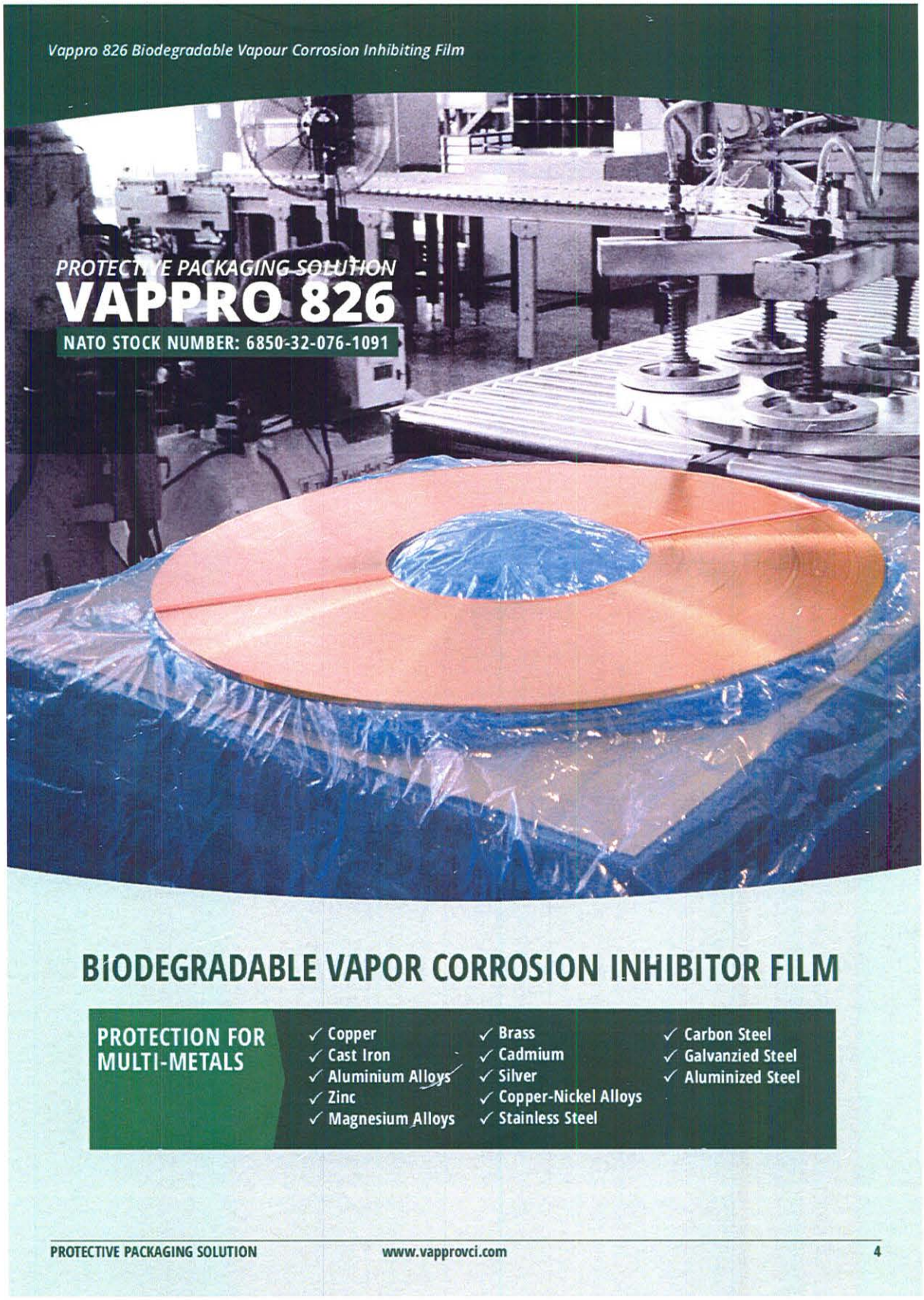
Cost Effective Total Corrosion Control with VAPPRO VCI

Eliminate oiling process

Vappro VCI gives total corrosion protection during shipment or storage

Removes process of degreasing and cleaning

PROTECTIVE PACKAGING SOLUTION www.vappvci.com 3


Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film
PROTECTIVE PACKAGING SOLUTION
VAPPRO 826
NATO STOCK NUMBER: 6850-32-076-1091
BIODEGRADABLE VAPOR CORROSION INHIBITOR FILM
PROTECTION FOR MULTI-METALS
✓ Copper
✓ Cast Iron
✓ Aluminium Alloys
✓ Zinc
✓ Magnesium Alloys
✓ Brass
✓ Cadmium
✓ Silver
✓ Copper-Nickel Alloys
✓ Stainless Steel
✓ Carbon Steel
✓ Galvanzied Steel
✓ Aluminized Steel
PROTECTIVE PACKAGING SOLUTION
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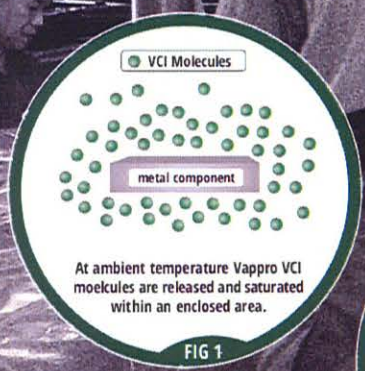
4

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

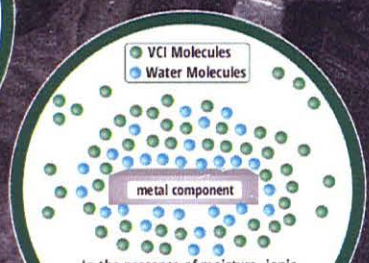
ADVANCEDVCI TECHNOLOGY

How VAPPRO VCI works?



At ambient temperature Vappro VCI moelcules are released and saturated within an enclosed area.

FIG 1

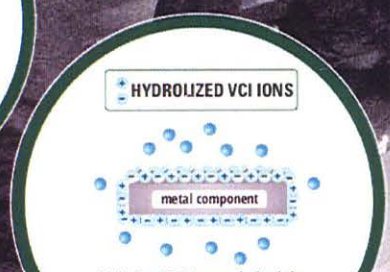


In the presence of moisture, ionic rection takes place between the VCI molecules and the water molecules in the moisture.

FIG 2

VCI molecules are hydrolized into VCI ions.

FIG 3



Hydrolized VCI ions polarized the surface of the metal component and passivates the metal component from corrosion.

FIG 4

About VAPPRO technology

The Magna International Group of Companies developed the most advanced and environmentally safe VCI technology known. We call it "**VAPPRO**".

VAPPRO stands for Vapour-Phase-Protection, which is the foremost state-of-the-art technology in Corrosion Prevention available today.

VAPPRO's innovative VCI technology has earned the recognition and confidence of its customers world-wide; ranging from the electronics to the automative industry; and from the packaging industry to the most prestigious computer industry.

VAPPRO's products conform to U.S. Military specifications. The superior quality, integrity and cost-effectiveness of our products has earned the company several major long term contracts in the military field around the world.

VAPPRO's international success can be accredited to the ingenuity and commitment of our research and development team. Their ongoing studies continue to create new products, while improving on existing ones, for this very competitive and demanding 21st century market.

Applications

- **For Protection of Parts, components, and completed assemblies during shipping and Storage against corrosion.**
- **Tools, spare parts, and components.**
- **Bin and box liners.**
- **Motors and mechanical controls.**
- **Electrical equipment and controls.**
- **Long tubular products and pipe.**

COMPANY INFORMATION

Magna group

INTRODUCTION

Magna Group of Companies consists of Magna International Pte Ltd, Magna Far East Pte Ltd, Magna Canada Inc, Magna Australia Pty Ltd and Magna Energy Pte Ltd. The Magna Group is one of the world's foremost leaders in the specialized fields of corrosion-preventive technology, specialty lubricants and cleaning surfactants. Since its incorporation in 1990, first starting out as a manufacturer and distributor of cleaning and maintenance chemicals, the Magna Group has now carved itself a niche in the area of specialty surfactants, lubricants and additives. The products of the Magna Group are marketed under the brands Vappro, Corpro and Lupromax.

Represented by distributors in more than thirty countries in the NAFTA Region, Asia Pacific and Europe, the Magna Group is continually reinventing itself to accommodate the ever-present changes in the chemical industry. We at Magna make use of the powers of innovation, science and technology to satisfy customers' requirements.

Magna has established itself as a brand of excellence. Over 180 products are listed in the NATO Master Cross Reference List (MCRL), with individually assigned NATO Stock Numbers for easy reference.

Magna's focus on technical expertise, operational excellence, and its range of practical yet environmentally-friendly products has netted us the certification of the ISO 9001:2000. Magna Group is committed to achieve our mission of improving the lives of consumers, satisfying the needs of customers, and continuing our contribution to the chemical

With company headquarters in Singapore, the Magna Group's in-house Research & Developments team has made milestone achievements in corrosion-preventive technology, water treatment chemicals, lubricants and specialty surfactants.

MAGNA INTERNATIONAL PTE LTD

Magna International Pte Ltd, an innovative chemical company that manufactures specialty chemical products, was incorporated in September 1992.

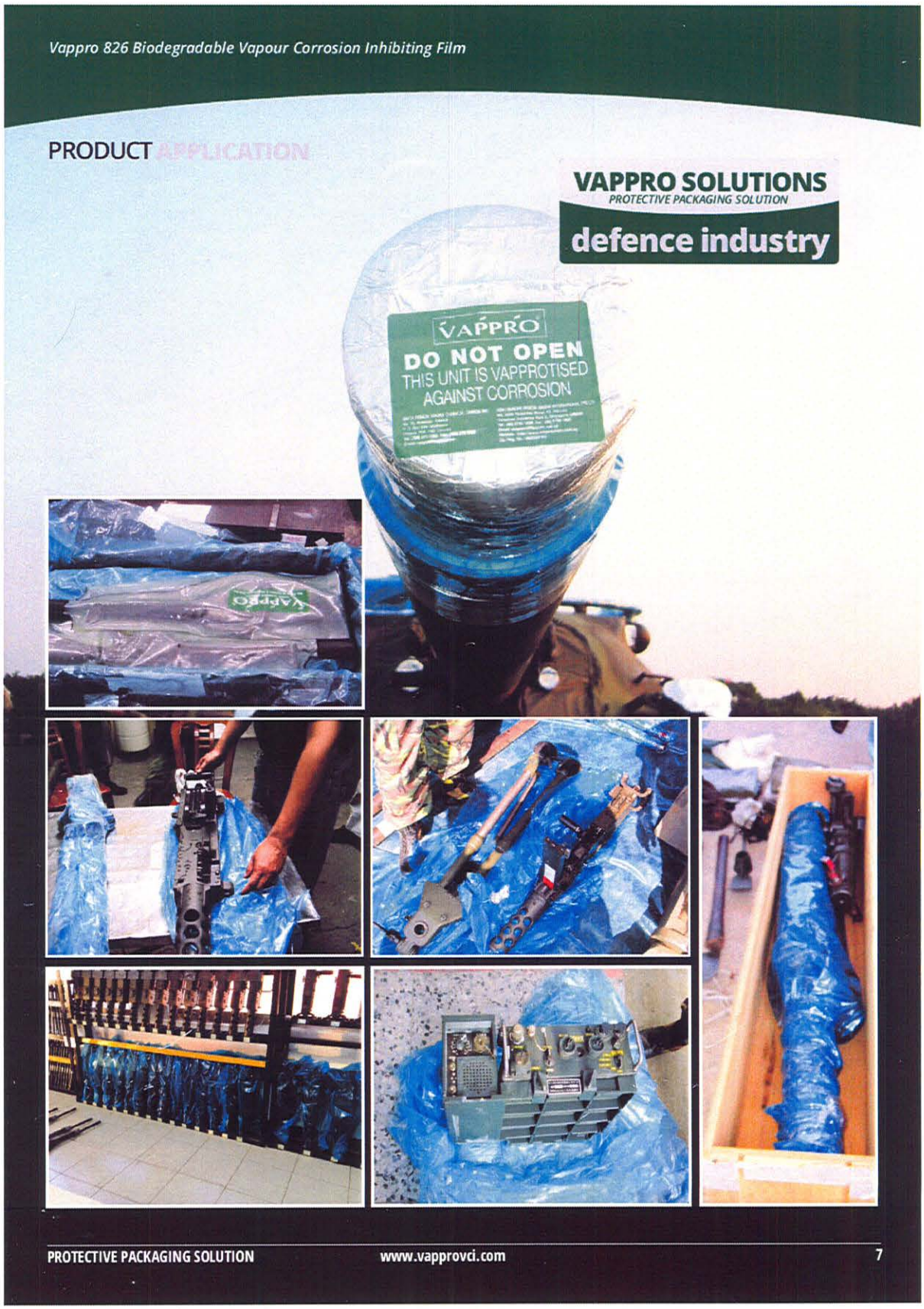
Our specialty chemical products are represented in 25 countries in the Asia Pacific Region and Europe.

MAGNA (FE) CHEMICAL PTE LTD

Magna (FE) Chemical Pte Ltd is a fast growing company that manufactures environment friendly, biodegradable products for a cleaner, greener, better tomorrow. It was incorporated in 8th August 1990 specializing in the blending and distribution of cleaning and maintenance chemicals.

Magna (FE) Chemical Pte Ltd is a registered contractor with the Ministry of Finance Expenditure and Procurement Policies Unit (EPPU), and Construction Industrial Development Board (CIDB).

Magna (FE) Chemical is currently supplying chemical products to Government Departments, Statutory Boards and various Government-Linked Companies.The factory is based at Enterprise Road, where both manufacturing and administrative functions are carried out. Research is also carried out in-house to create new chemical products and to improve existing products.


Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film
PRODUCT APPLICATION
VAPPRO SOLUTIONS
PROTECTIVE PACKAGING SOLUTION
defence industry
VAPPRO
DO NOT OPEN
THIS UNIT IS VAPPROTISED
AGAINST CORROSION
PROTECTIVE PACKAGING SOLUTION
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7

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

PRODUCT APPLICATION

VAPPRO SOLUTIONS
PROTECTIVE PACKAGING SOLUTION

marine industry

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

PRODUCT APPLICATION

VAPPRO SOLUTIONS
PROTECTIVE PACKAGING SOLUTION

marine industry

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

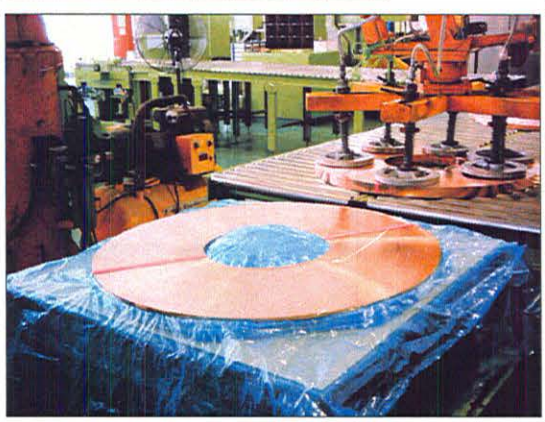
PRODUCT APPLICATION

VAPPRO SOLUTIONS
PROTECTIVE PACKAGING SOLUTION
automotive industry





VAPPRO SOLUTIONS
PROTECTIVE PACKAGING SOLUTION
manufacturing industry




Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

PRODUCT TEST REPORT

SGS

Test Report **No. SH6136667/CHEM** Date: Nov. 9, 2006 Page 1 of 3

MAGNA CHEMICALS (SHANGHAI) CO.,LTD ON BEHALF OF MAGNA INTERNATIONAL PTE LTD
UNIT 301 NO.950 JINSHAJIANG ROAD SHANGHAI P.R.C 200062

Report on the submitted sample said to be VAPPRO 826 VAPOUR CORROSION INHIBITOR (VCI) FILM.

SGS Ref No. : 10143213
Model No : V-826
Main substance : LDPE

Sample Receiving Date : Aug.15, 2006
Testing Period : Aug.15– 18, 2006

Test Requested : 1) To determine the Cadmium Content in the submitted sample.
2) To determine the Lead Content in the submitted sample.
3) To determine the Mercury Content in the submitted sample.
4) To determine the Hexavalent Chromium Content on the submitted sample.
5) To determine the PBBs(Polybrominated biphenyls) PBBEs(PBDEs) (Polybrominated biphenyl ethers) Content of the submitted sample.

Test Method : 1) With reference to BS EN 1122:2001, Method B, or other acid digestion. Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
2) With reference to EPA Method 3050B/ 3051/ 3052, or other acid digestion Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
3) With reference to US EPA 3052 or other acid digestion, Analysis was performed by Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES) or US EPA7473 Analysis was performed by Hg Analyzer.
4) With reference to EPA Method 3060A & 7196A. The samples were alkaline digested by using EPA Method 3060A, and then analyzed by using Colorimetric method 7196A(by UV-Vis Spectrophotometer).
5) With reference to USEPA 8081A/8270D/3540C/3550C, Analysis was performed by GC-MS.

Test Results : Please refer to next page

Signed for and on behalf of
SGS-CSTC Chemical Laboratory

Ella Zhang
Sr. Section Head

Signed for and on behalf of
SGS-CSTC Chemical Laboratory

Sandy Hao
Lab Manager

SHCHEM 998214
10/F,3rd Building,No.889 Yishan Road,Shanghai,China 200233 t(&f) (86-21) 61402553 t(&f) (86-21) 64953679 www.cn.sgs.com
中国·上海·宜山路889号3号楼10层 邮编:200233 tel: (86-21) 61402594 fax: (86-21) 54500253 e.sgs.china@sgs.com

SGS

Test Report **No. SH6136667/CHEM** Date: Nov. 9, 2006 Page 2 of 3

Test Results

No.	Item	Unit	DL	A
1	Cadmium (Cd)	mg/kg	2	N.D.
2	Lead (Pb)	mg/kg	2	N.D.
3	Mercury (Hg)	mg/kg	2	N.D.
4	Hexavalent Chromium (Cr VI)	mg/kg	2	N.D.
5	Polybrominated biphenyls (PBBs)	---	---	---
	Monobromobiphenyl	mg/kg	5	N.D.
	Dibromobiphenyl	mg/kg	5	N.D.
	Tribromobiphenyl	mg/kg	5	N.D.
	Tetrabromobiphenyl	mg/kg	5	N.D.
	Pentabromobiphenyl	mg/kg	5	N.D.
	Hexabromobiphenyl	mg/kg	5	N.D.
	Heptabromobiphenyl	mg/kg	5	N.D.
	Octabromobiphenyl	mg/kg	5	N.D.
	Nonabromobiphenyl	mg/kg	5	N.D.
	Decabromobiphenyl	mg/kg	5	N.D.
	Polybrominated biphenyl ethers (PBBEs(PBDEs))	---	---	---
	Monobromobiphenyl ether	mg/kg	5	N.D.
	Dibromobiphenyl ether	mg/kg	5	N.D.
	Tribromobiphenyl ether	mg/kg	5	N.D.
	Tetrabromobiphenyl ether	mg/kg	5	N.D.
	Pentabromobiphenyl ether	mg/kg	5	N.D.
	Hexabromobiphenyl ether	mg/kg	5	N.D.
	Heptabromobiphenyl ether	mg/kg	5	N.D.
	Octabromobiphenyl ether	mg/kg	5	N.D.
	Nonabromobiphenyl ether	mg/kg	5	N.D.
	Decabromobiphenyl ether	mg/kg	5	N.D.

Sample Appearance Description(Photo see appendix):
A. Blue transparent plastic film
Note : 1mg/kg=1ppm=0.0001%
DL= Detection Limit
N.D. = Not detected
Not Detected is reported when the reading is less than detection limit value.
The test results are taken from report SH6103604/CHEM, Date:2006/08/18

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Member of the SGS Group (SGS SA)

SGS

Test Report **No. SH6136667/CHEM** Date: Nov. 9, 2006 Page 2 of 3

Test Results

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	Tetrabromobiphenyl	mg/kg	5	N.D.
	Pentabromobiphenyl	mg/kg	5	N.D.
	Hexabromobiphenyl	mg/kg	5	N.D.
	Heptabromobiphenyl	mg/kg	5	N.D.
	Octabromobiphenyl	mg/kg	5	N.D.
	Nonabromobiphenyl	mg/kg	5	N.D.
	Decabromobiphenyl	mg/kg	5	N.D.
	Polybrominated biphenyl ethers (PBBEs(PBDEs))	---	---	---
	Monobromobiphenyl ether	mg/kg	5	N.D.
	Dibromobiphenyl ether	mg/kg	5	N.D.
	Tribromobiphenyl ether	mg/kg	5	N.D.
	Tetrabromobiphenyl ether	mg/kg	5	N.D.
	Pentabromobiphenyl ether	mg/kg	5	N.D.
	Hexabromobiphenyl ether	mg/kg	5	N.D.
	Heptabromobiphenyl ether	mg/kg	5	N.D.
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	Nonabromobiphenyl ether	mg/kg	5	N.D.
	Decabromobiphenyl ether	mg/kg	5	N.D.

Sample Appearance Description(Photo see appendix)
A Blue transparent plastic film
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SGS

SHCHEM 998215

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Member of the SGS Group (SGS SA)

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

GE Pacific Pte Ltd - Q&C
Customer Application Center
31 Kok Buket Road 3, Techlink
Singapore 417818
T 65 6213 5600
F 65 6213 5599
Co. No: 197000148E

15th Aug 2013

TO WHOM IT MAY CONCERN

We were introduced to Magna International Pte Ltd for VCI packaging of equipments to our customers overseas. The products used in the packaging are:-

1. Vappro 823 VCI Pouch
   Nato Stock No: 6850-32-078-2670
   Conforms to Mil-I-22110C

2. Vappro 826 VCI Plastic Film
   Nato Stock No: 6850-32-076-1091

Since implementing the use of VAPPRO VCI Packaging, we have found these products to be very effective in the protection of both ferrous and non-ferrous metal especially the electrical/electronic parts of the equipment. These products also offer us a new concept without the need for our customers to remove any coating which they are satisfied and it also fulfils their requirements.

We would strongly recommend VAPPRO products to other potential users. We are indeed satisfied with the benefits of these products.

Yours faithfully,

GE (Measurement & Control)

Rajkumar Sreeram Muthiah

Logistics Specialis

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

26th July 2002

TO WHOM IT MAY CONCERN

This is to certify that we have carried out a trial on Vappro VCI Gun Bags from November 2000 to December 2001.

Vappro VCI Gun Bags were proven effective and were able to protect our small arms from rust and corrosion.

Subsequently, we purchased 100 more bags for the preservation of our small arms.

We are pleased with Vappro VCI products and its preservation method.

Thank you.

Yours sincerely,
NAVAL MATERIAL & TRANSPORT BASE

2WO LEE CHENG KEONG
OIC AMAMENT SECTION
CHANGI NAVAL BASE

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

MATCOR AUTOMOTIVE INC.
Excellence Above & Beyond

1620 STEELES AVE. EAST
BRAMPTON, ONTARIO
L6T 1A5
PHONE 905 793-4035
FAX 905 793-1609

Matsu Manufacturing &
Matcor Automotive Inc.
1620 Steeles Ave, East
Brampton, ONT L6T 1A5
Phone: (905) 793-4035 Ext: 313
Fax: (905) 793-7061

Date: August 30th, 2012

To Whom it may concern:

This letter serves as a testimonial and to confirm that Magna Chemical Canada Inc. is the manufacturer and exclusive supplier of VAPPRO VCI Film products to **Matsu Manufacturing/Matcor Automotive Inc.** Matsu/Matcor are pleased to acknowledge the impeccable technical services and quality products that Magna delivers its customers.

Currently, Magna has been contracted by Matsu/Matcor to provide custom size VAPPRO VCI BAG for packaging **Honda** automotive part for the next 5 years as well as other custom VCI bags use for packaging **GM Motors** auto parts. We are satisfied with Magna's quality services, prompt delivery and their VAPPRO VCI PRODUCTS are effective as claimed.

We wish to commend Magna Chemical Canada Inc. for their professionalism, quality products and services. We will not hesitate to recommend Magna and their VAPPRO VCI PRODUCTS to all potential users.

Sincerely,

Giang Ngo
Packaging Specialist
Matsu Manufacturing
Matcor-Automotive

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

CACTUS

NIPPON MINING SINGAPORE PTE. LTD.

41 GUL DRIVE, JURONG, SINGAPORE 629489
TEL: 8611084 FACSIMILE: 8615971

4th September, 2002

TO WHOM IT MAY CONCERN

Magna International Pte Ltd has been supplying us customized Blue VCI P.E. Film known as VAPPRO 826, codified in Nato Codification System with the Nato Stock Number : 6850-32-076-1091 and conforms to MIL-B-22019C.

Since using them a few years ago, we have found this product very effective in protecting non-ferrous metal from corrosion. This product offers us a new concept without the need for other rust preventive coatings which our customers are satified and it fulfils their requirements.

We would strongly recommend this product to other potential users. We are indeed satified with the benefits of this product.

Yours faithfully,
NIPPON MINING SINGAPORE PTE LTD

.....
Steven Ong
Marketing Manager

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

Singapore Technologies Kinetics
A company of Singapore Technologies Engineering

Singapore Technologies Kinetics Ltd
5 Portsdown Road
Singapore 139296
Tel: 473 6311
Fax: 471 0662
http://www.stengg.com

25 March 2004

TESTIMONIAL

To Whom It May Concern

Magna International Pte Ltd has been supplying us Vappro VCI product since 1996.

This is used by us to preserve more than 1000 Military Vehicles and Equipment for the Armed Forces.

We find this product very effective in its application and indeed able to perform as claimed. That is corrosion protection up to 2 years.

We are satisfied with Vappro VCI products and it preservation methods. We would therefore recommend this to potential users.

SINGAPORE TECHNOLOGIES KINETICS

Mr So Boon Hwa
Manager
VPS

Vappro 826 Biodegradable Vapour Corrosion Inhibiting Film

CUSTOMER'S TESTIMONIAL

MSCM **MATERIALS SERVICE COMPLEX MALAYSIA SDN.BHD.** (764893-V)
Plot D23, Jalan DPB/7, Kawasan Zon Perindustrian Bebas, Pelabuhan Tanjung Pelepas,
81560 Gelang Patah, Johor Darul Takzim, Malaysia.
Tel: (+607) 557 7660 Fax: (+607) 557 8660

1st Feb 2013

TO WHOM IT MAY CONCERN

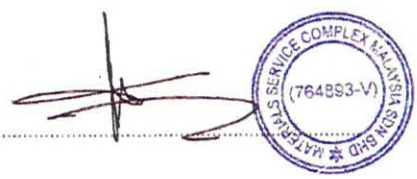
Magna International Pte Ltd has been supplying us customized VCI PE Film known as VAPPRO 826, codified in NATO Codification System with the NATO Stock Number : 6850 32 076 1091 and conforms to MIL-B-22019C.

Since using them for more than 10 years, we have found this product to be very effective in the protection of non-ferrous metal especially copper against corrosion (oxidation in the case of copper). This product also offers us a new concept without the need for other rust preventive coating which our customers are satisfied and it fulfils their requirements.

We would strongly recommend this product to other potential users. We are indeed satisfied with the benefits of this product.

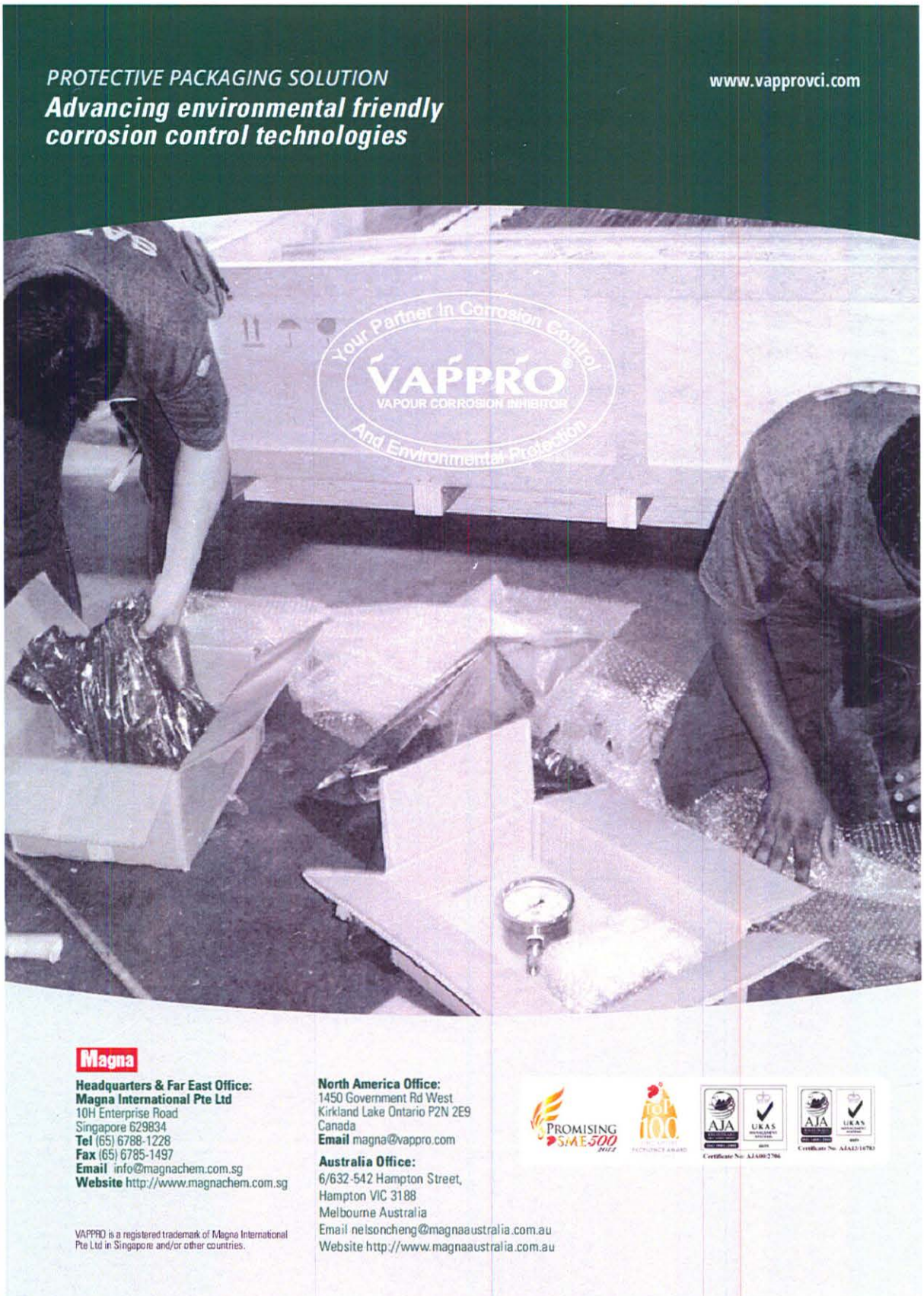
Yours faithfully

MATERIALSL SERVICE COMPLEX MALAYSIA SDN BHD



Calvin Ng

Manager/Operation & Quality Assurance Depts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And Environmental Protection
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Headquarters & Far East Office:
Magna International Pte Ltd
10H Enterprise Road
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Tel (65) 6788-1228
Fax (65) 6785-1497
Email info@magnachem.com.sg
Website http://www.magnachem.com.sg
VAPPRO is a registered trademark of Magna International Pte Ltd in Singapore and/or other countries.
North America Office:
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Kirkland Lake Ontario P2N 2E9
Canada
Email magna@vappro.com
Australia Office:
6/632-542 Hampton Street,
Hampton VIC 3188
Melbourne Australia
Email nelsoncheng@magnaaustralia.com.au
Website http://www.magnaaustralia.com.au
PROMISING SME500
AJA
UKAS

RoHS COMPLIANT
EUROPEAN COMMUNITY DIRECTIVE 2002/95/EC

PRODUCT INFORMATION	
PRODUCT CODE	VAPPRO 826
DESCRIPTION	VAPPRO VCI FILM
DATE OF TEST	13 APRIL 2007
TESTED BY	BUREAU VERITAS
BV TEST REPORT NO	**(6607) 081-0553**

BUREAU VERITAS

ROHS COMPLIANCE TEST REPORT

VAPPRO 826

Magna International Pte Ltd. 10H, Enterprise Road, Singapore 629834 **T** (65) 6788-1228 **F** (65) 6785-1497 **E** info@magnachem.com.sg **W** http://www.magnachem.com.sg

BUREAU VERITAS

TEST REPORT

TO: MAGNA INTERNATIONAL PTE. LTD.
BLK 9005 TAMPINES STREET 93 #02-242
TAMPINES INDUSTRIAL PARK A
SINGAPORE 528839

LAB NO: (6607) 081-0553 (REVISED)
DATE IN: MAR. 23, 2007
DATE OUT: APR. 02, 2007
MOD. LOG IN: /
TURN AROUND TIME: 7
REVISED DATE: APR. 13, 2007
PAGE 1 OF 2

SAMPLE DESCRIPTION:	VAPPRO 826 VCI POLYETHYLENE FILM/BAG
MANUFACTURER:	MAGNA INTERNATIONAL PTE. LTD.
COUNTRY OF ORIGIN:	SINGAPORE
COUNTRY OF DESTINATION:	/
MODEL/STYLE:	V-826
SKU#:	/
PO#:	/
COLOR:	BLUE
SAMPLE QUANTITY:	1SET

Revised Reason: As per vendor's request, add the company address and change the manufacturer name, country of origin in the revised report.

Test Requested: Evaluation Of The Sample From The Viewpoint Of FDA CFR 21 177.1520 Test Only As Requested By The Client.

Comments:

The test results are listed as below:

U.S. FDA 21 CFR part 177.1520 -Olefin polymer

Client claimed material: Polyethylene

Test Item	1	Requirements
Density (gm/cm^3)	0.920	0.85-1.00
n-hexane extractives (%)	1.44	Max. 5.5
Xylene extractives (%)	2.65	Max. 11.3
Conclusion	PASS	

Tested Item 1: Transparent blue plastic (polyethylene) sheet

Note: < = less than

SHA/LY/Y/N/AL

WPO WORLD PACKAGING ORGANISATION
WORLDSTAR WINNER 2013-2014

TOP 20

ASIA EXCELLENCE AWARD 2013

Singapore Packaging STAR AWARD 2013

PROMISING SME500 2013

TOP 100 SME EXCELLENCY AWARD

Vappro 826 VCI Film, winner of the WORLDSTAR PACKAGING AWARD

Magna is pleased to inform all business associates, global distributors and valued customers that Vappro 826 VCI film has been accorded the most prestigious packaging global packaging award-The WorldStar Packaging Award by World Packaging Organization (WPO), after winning the Singapore Star Packaging Award organized by the Singapore Manufacturing Federation.

The WorldStar Packaging Award Competition is one of the major events of the World Packaging Organisation (WPO). Judging took place in Barcelona on 7th November 2013 when representatives from 24 packaging associations, members of WPO (World Packaging Organisation), judged 249 packaging projects, from 35 countries, that applied for WorldStar Awards 2014.

The WorldStar Packaging Award is a pre-eminent international award in packaging. WorldStar illustrates the continual advancement of the state of packaging design and technology and creates a living standard of international packaging excellence from which others may learn.

WorldStars are presented only to those packs which having already won recognition in a national or regional competitions, are compared by an expert panel of judges to similar packs from around the world. Awards are based on the judges' consensus that a pack is superior in its category and market and better in its class in execution or innovation by comparison to others.

Since 1970, the World Packaging Organisation has given awards to numerous new packs from all around the world.

Considered the most important global packaging award, the WorldStar is based on the judges' consensus that a pack is superior in its own right and better in its class, in execution, or innovation by comparison. The judges consider the following criteria: protection and preservation of contents; ease of handling, filling, opening and closing; adequacy of information; sales appeal; graphic design; quality of production; economy of material and cost reduction; environment; ingenuity of construction; and adaption to local conditions (production, materials, market etc).

Winners of a Worldstar are also eligible to participate in three special categories: Sustainable Packaging Award, Marketing Award and President's Award. According to Thomas Schneider, President of WPO, the ward "illustrates the continuous advance of the state of packaging and creates a living standard of international packaging excellence from which others may learn".

As a WorldStar winner Magna will be formally honoured at an Awards Presentations Ceremony in Dusseldorf, Germany on Tuesday 13 May 2014. The said ceremony is to honour winning companies with innovative and creative packaging designs for their products. It recognizes and rewards excellence in packaging, in areas of construction and materials usage, design, innovation technology and environmental consciousness.

The said earned accolade validates our company's belief that "Solving Corrosion Problem with the Environment in Mind" should be fully embraced.

VAPPRO
Solving Corrosion Problem with the Environment in Mind®

Magna

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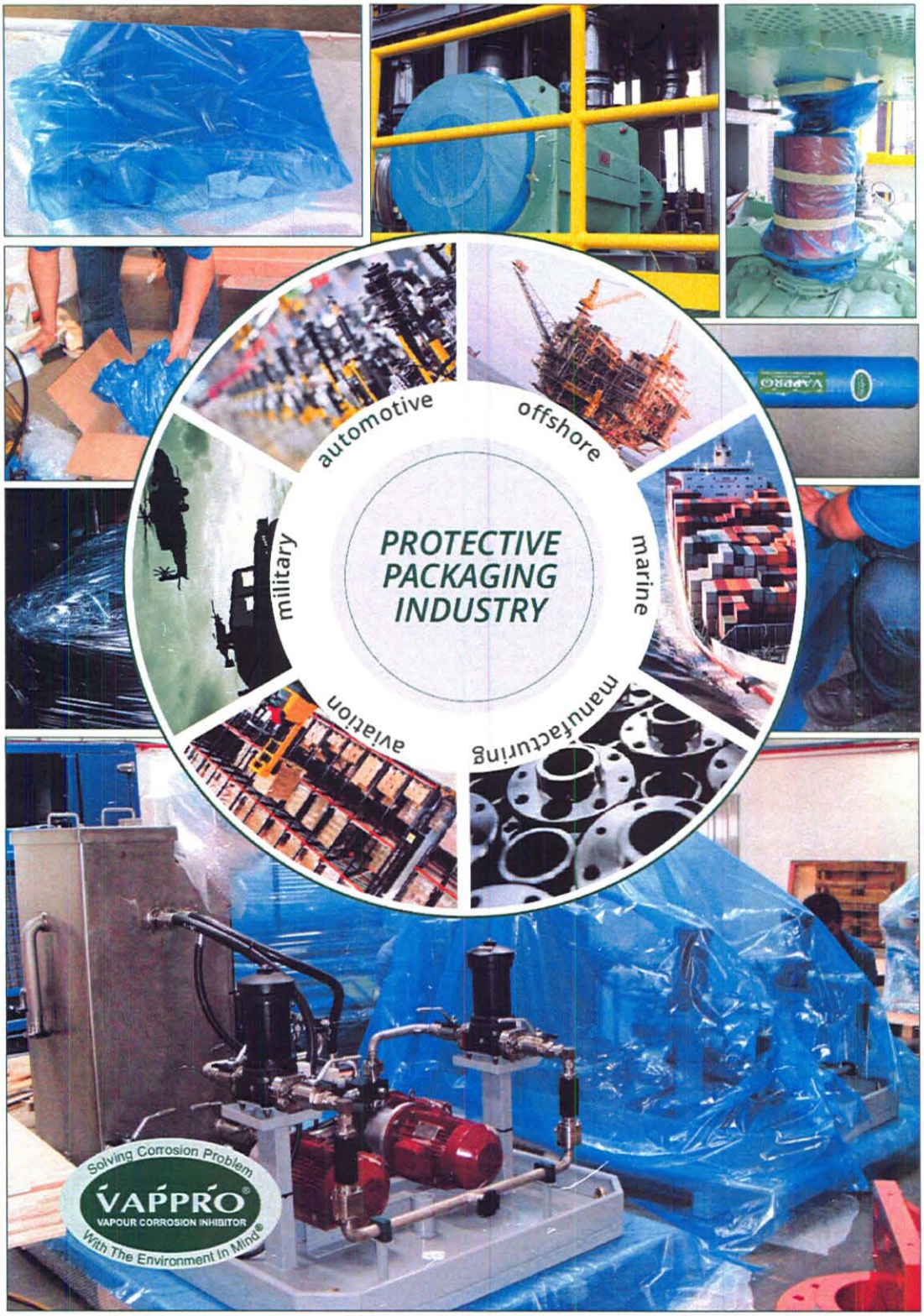
Hampton VIC 3188
Melbourne Australia
Email
nelsoncheng@magnaaustralia.com.au
Website
http://www.magnaaustralia.com.au

ISO 9001 ISO 14001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Solving Corrosion Problem
VAPPRO
VAPOUR CORROSION INHIBITOR
With The Environment In Mind

MEDIA INDONESIA

FLU BURUNG

Disinfektan AQ Bunuh Virus

JAKARTA (MI): Disinfektan berbahan *ammonium quaternary* (AQ) dapat mencegah penyebaran virus flu burung secara efektif. Bahan tersebut mampu membunuh mikroorganisme seperti bakteri, virus, spora, dan jamur.

"Setelah dilakukan beberapa kali uji coba, terbukti *ammonium quaternary* terbukti 100% dapat membunuh virus flu burung," kata Kepala Bagian Departemen Patologi Fakultas Kesehatan Hewan Institut Pertanian Bogor (IPB) Agus Setiyono di Jakarta, kemarin.

Pengujian *ammonium quaternary* dilakukan dengan menggunakan isolat virus *avian influenza* (AI) H5N1 di Tasikmalaya pada 2005. Kendati uji coba hanya menggunakan isolat virus H5N1, Agus meyakini disinfektan itu dapat membunuh virus flu burung secara efektif.

Ia menjelaskan pada uji coba, disinfektan *ammonium quaternary* disemprotkan ke kandang unggas. Terbukti, selama 48 jam, ayam yang terdapat dalam kandang unggas itu terlindungi dari serangan virus dan spora.

Dari pantauan di berbagai negara, menurut Agus, sejumlah negara seperti Kanada, Singapura, dan beberapa negara maju juga menggunakan disinfektan *ammonium quaternary* yang berjenis *twin-chain ammonium quaternary*.

Pada kesempatan yang sama, Chief of Executive Officer (CEO) Magna International Pte Ltd Singapore Nelson Cheng mengatakan disinfektan berbahan *twin-chain ammonium quaternary* telah dikembangkan sejak 4,5 tahun lalu di Singapura.

Disinfektan itu bahkan telah digunakan saat penyakit *severe acute respiratory syndrome* (SARS) merebak di Singapura. "Dengan penyemprotan yang benar, disinfektan *twin-chain ammonium quaternary* dapat mencegah kemungkinan terjadi wabah flu burung," tutur Nelson.

> 'Dengan penyemprotan yang benar, disinfektan *twin-chain ammonium quaternary* dapat mencegah kemungkinan terjadi wabah flu burung.'
>
> **Nelson Cheng - CEO Magna International Pte Ltd Singapore**

Sementara itu, Agus menyarankan agar penggunaan disinfektan berbahan triklosan dan fenol tidak lagi digunakan sebagai bahan penyemprot pembasmi virus, jamur, dan kuman untuk peternakan unggas di Indonesia.

Menurut Agus, disinfektan mengandung triklosan berpotensi menyebabkan kanker kulit. Pasalnya, triklosan termasuk bahan yang bersifat karsinogenik atau bahan yang dapat memicu penyakit kanker.

"Bila disinfektan itu mengenai tangan penyemprot, kulit yang bersangkutan dapat terserang penyakit kanker kulit," ujarnya. Selain itu, triklosan dapat memicu resistensi virus pada bahan disinfektan. Hal yang sama terjadi pada disinfektan berbahan fenol.

(Tlc/H-2)

BIKINAN LUAR: Pengenalan disinfektan untuk membasmi flu burung.

Singapura Buat Disinfektan Flu Burung

VIRUS *avian influenza* (flu burung) yang ditemukan pada unggas bisa dibasmi sebelum menginfeksi manusia. Virus yang dikenal dengan H5N1 itu bisa dibenteng sebelum menginfeksi unggas atau ternak sehingga tidak menular pada manusia.

Kemarin, sebuah perusahaan dari Singapura memperkenalkan sebuah disinfektan untuk menghambat perkembangan virus flu burung pada unggas. Disinfektan jenis deterjen Magic Lagionella-X itu dikembangkan dari *isolate* virus Al H5N1 Tasikmalaya sejak 2005 lalu.

"Tidak masalah kalau *virus avian influenza* kita telah bermutasi dengan cepat. Sebab disinfektan itu tidak hanya membunuh virus, tapi juga jamur dan bakteri," kata drh Agus Setiyono, MS PhD, ahli patologi FKH IPB Bogor dalam diskusi Disinfektan Pembunuh Virus Flu Burung di Hotel Cipetra, kemarin.

Agus menjelaskan, perpindahan virus dari hewan ke manusia bisa dihambat dengan penggunaan disinfektan. "Virus avian influenza dikenal sebagai mahluk *zoonosis* dengan tingkat kematian 90-100 persen dalam waktu 48 jam," tutur Agus.

Disinfektan baru itu akan didaftarkan di Departemen Pertanian dan diklaim aman bagi lingkungan. Namunya disinfektan itu diproduksi di dalam negeri (Indonesia). (aya)

Inilah.com, 12 May 2008, Gaya Hidup

Terminate Avian Flu with Legionella-x

INILAH.COM, Jakarta – Magna International Pte Ltd (MI) which based in Singapore introduced Legionella-x disinfectant that can 100% kills avian flu virus (H5N1) after successfully passed the test in Institut Pertanian Bogor laboratory.

"Legionella-x contains *ammonium quaternary* which is cationic detergent. Therefore really safe and effective to kill H5N1 virus," said the pathologist of Faculty of Veterinary Institut Pertanian Bogor (IPB) who is also one of the researchers of Legionella-X disinfectant, Agus Setiyono.

He also added that Legionella-X kills H5N1 virus which always mutated and easily transmitted.

Meanwhile, Chief Executive Officer (CEO) MI Nelson Cheng said that Legionella-X disinfectant is the effort to control and minimize avian flu pandemic which already taken a big number of casualties, especially in Indonesia.

"Preventive action is better than medication because sometimes to find the cure of a sickness would need a really long time," added Nelson.

Agus Setiyono said that the laboratory test of Legionella-X was done in Microbiology Service Unit in IPB with the isolate virus of Avian influenza (AI) Tasikmalaya on 2005, which originated from Microbiology Faculty of Veterinary IPB.

He explained that the test method was done by injecting the Legionella-X 100% concentrate to embryonic egg which already been injected by H5N1. The dilution of Legionella-X was done with 1:1 equation.

The dilution itself was done with pure H2O and antibiotic then added by 2ml H5N1 virus.

After 15 minutes incubation in 37 degree Celsius, the observation was done every day by telescoping the embryonic egg.

The observation stopped on the second day because the embryonic egg has died. The last test was done to the egg and apparently the H5N1 virus has died.

Legionella-X is used by spraying it to the air. However, Nelson Cheng said that they have not market Legionella-X because they are still in the process of partnering with several

health organizations to do the socialization. "The product will be affordable for sure," said Nelson.

Meanwhile, Agus Setiyono said that currently, Legionella-X has not been registered to Food and Drug Monitoring Agency (**BPOM**).

"This is still a trial test. So we haven't registered it. Eventually it will be registered to BPOM and Agriculture Department," said Agus.

Based on the data from World Health Organization (WHO), as many as 108 people died in Indonesia due to AI. Avian influenza disease is a contagious disease with 90-100% mortality rate in 48 hours. H5N1 virus usually can be found on bird or poultry.

Indo Pos, Tuesday, 13 May 2008, Page. 13 / Jakarta Raya

Singapore Accomplishes Avian Influenza Disinfectant

Avian influenza virus which found in poultry now can be exterminated before it infected human. The virus that is known by H5N1 can be fortified before it infected poultry or livestock therefore it will not contaminate human.

Yesterday, a company from Singapore introduced a disinfectant to immobilize avian flu virus development in poultry. The detergent-type disinfectant, Magna Legionella-X was developed from the Tasikmalaya isolate AI H5N1 virus since 2005.

"It is no problem that the avian influenza virus now has mutated rapidly. Because the disinfectant not only kills virus, but also fungus and bacteria," said drh Agus Setiyono MS PhD, pathologist of Faculty of Veterinary IPB Bogor in Avian Flu Virus Killer Disinfectant discussion at Ciputra Hotel, yesterday.

Agus explained that the migration of virus from animals to human can be inhibited with the use of disinfectant. "Avian influenza virus is known as zoonosis organism with 90-100 percent mortality rate in 48 hours," said Agus.

The new disinfectant will be registered to the Ministry of Agriculture and it is claimed to be safe for environment. Eventually, the disinfectant will be manufactured in the country (Indonesia).

Media Indonesia, 13 May 2008, Front Page

AQ Disinfectant Kills Virus

Jakarta (MI): Disinfectant made with *ammonium quaternary* (AQ) can effectively prevent the widespread of avian flu. That compound is able to kill microorganism namely bacteria, virus, spore, and fungus.

"After several tests, it is proved that ammonium quaternary can 100% kills avian flu," said the Pathology Department Chief of the Faculty of Veterinary at Institut Pertanian Bogor (IPB), Agus Setiyono, in Jakarta, yesterday.

The ammonium quaternary test is done by using the isolate virus of avian influenza (AI) H5N1 in Tasikmalaya on 2005. Even though the test only used the H5N1 isolate virus, Agus believed that this disinfectant can effectively kills avian flu.

He explained that in the test, ammonium quaternary disinfectant was sprayed to poultry barn. It is proven that after 48hours, the chicken in the barn is protected from virus and spore attack.

From the observation of several countries, according to Agus, countries like Canada, Singapore and several developed countries also use *ammonium quaternary* disinfectant of the *twin-chain ammonium quaternary* type.

In the same occasion, Chief of Executive Officer (CEO) Magna International Pte Ltd Singapore Nelson Cheng said that the *twin-chain ammonium quaternary* disinfectant has been developed for 4.5 years in Singapore.

That disinfectant has even been used during the outbreak of *severe acute respiratory syndrome (SARS)* in Singapore. "With the right spraying, *twin-chain ammonium quaternary disinfectant* can prevent the possible avian flu epidemic," said Nelson.

Meanwhile, Agus suggested that the usage of triclosan and phenol disinfectant as virus, fungus, and germs exterminator in Indonesian poultry farm should be stopped.

According to Agus, triclosan disinfectant potentially causes skin cancer, because triclosan is one of the carcinogenic substances or the substance that can trigger cancer.

"If the disinfectant touches the skin of the sprayer, the said skin can be affected by skin cancer," said Agus. Nevertheless, triclosan can trigger virus resistance to disinfectant substances. The same thing also occurs to phenol disinfectant.

: GAYA HIDUP

12/08/2008 21:14 WIB

Basmi Flu Burung dengan Legionella-X

AUGUSTA S. SIRAIT

(Istimewa)

INILAH.COM, Jakarta - Magna International Pte Ltd (MI) yang berbasis di Singapura memperkenalkan disinfektan Legionella-X yang mampu membunuh 100% virus flu burung H5N1 setelah sebelumnya lulus uji tes di laboratorium Institut Pertanian Bogor.

"Legionella-X mengandung *amonium kuartener* yang masuk golongan deterjen kationik. Jadi sangat aman dan ampuh membunuh virus H5N1," ujar Ahli Patologi Fakultas Kedokteran Hewan Institut Pertanian Bogor (IPB) yang juga menjadi anggota tim peneliti disinfektan Legionella-X Agus Setiyono.

Ia juga menambahkan bahwa Legionella-X bekerja membunuh virus H5N1 yang selalu bermutasi dan mudah menular.

Sementara itu, Chief Executive Officer (CEO) MI Nelson Cheng menyatakan bahwa disinfektan Legionella-X adalah upaya untuk mengendalikan dan meminimalisir pandemi flu burung yang telah menelan banyak korban jiwa, khususnya di Indonesia.

"Tindakan preventif lebih baik daripada pengobatan karena kadang-kadang untuk menemukan obat dari suatu penyakit membutuhkan waktu lama," imbuhnya.

Agus Setyono mengatakan uji tes laboratorium

Legionella-X dilakukan di laboratorium Unit Pelayanan Mikrobiologi di IPB dengan menggunakan isolat virus Avian Infuenza (AI) Tasikmalaya tahun 2005 yang berasal dari Mikrobiologi Fakultas Kedokteran Hewan IPB.

Ia menjelaskan bahwa metode pengujian dilakukan dengan menyuntikkan Legionella-X konsentrasi 100% pada telur berembrio yang sudah dimasukkan H5N1. Pengenceran Legionella-X dilakukan dengan perbandingan 1:1.

Pengenceran yang dilkukan dengan H_2O murni dan antibiotik kemudian ditambahkan dengan 2 ml virus H5N1.

Setelah di inkubasi selama 15 menit pada suhu 37 derajat celsius. Pengamatan dilakukan setiap hari dengan cara meneropong telur berembrio tersebut.

Pengamatan pun dihentikan pada hari kedua karena telur berembrio itu mati. Tes terakhir dilakukan pada telur tersebut dan ternyata virus H5N1 telah mati.

Legionella-X digunakan dengan cara disemprotkan ke udara bebas. Legionella-X Akan tetapi Nelson Cheng mengatakan bahwa pihaknya sampai saat ini belum memasarkan Legionella-X karena masih bekerjasama dengan beberapa organisasi kesehatan untuk melakukan sosialisasi produknya. "Yang jelas pasti terjangkau," ujarnya.

Sementara itu, Agus Setiyono mengatakan bahwa Legionella-X saat ini belum didaftarkan ke Badan Penelitian dan Pengawasan Obat dan Makanan (BPPOM).

"Ini kan baru tes trial. Jadi belum melakukan registrasi. Tapi nantinya produk ini akan didaftarkan ke BPPOM dan Departemen Pertanian," tukasnya.

Berdasarkan data dari badan kesehatan dunia WHO tercatat 108 orang meninggal dunia di Indonesia karena terinfeksi AI. Penyakit *avian influenza* merupakan penyakit menular dengan tingkat kematian 90-100% dalam waktu 48 jam. Virus H5N1 umumnya ditemukan pada burung atau unggas. [L1]

[Kirim ke teman]

Magna
YOUR PARTNER IN CHEMICAL INNOVATION

Newsletter

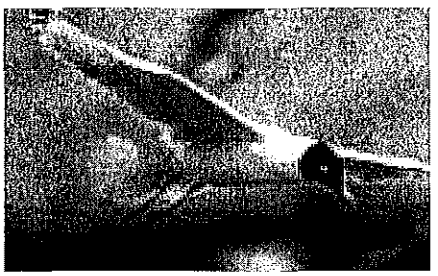
Certificate No. : AJA00/2705

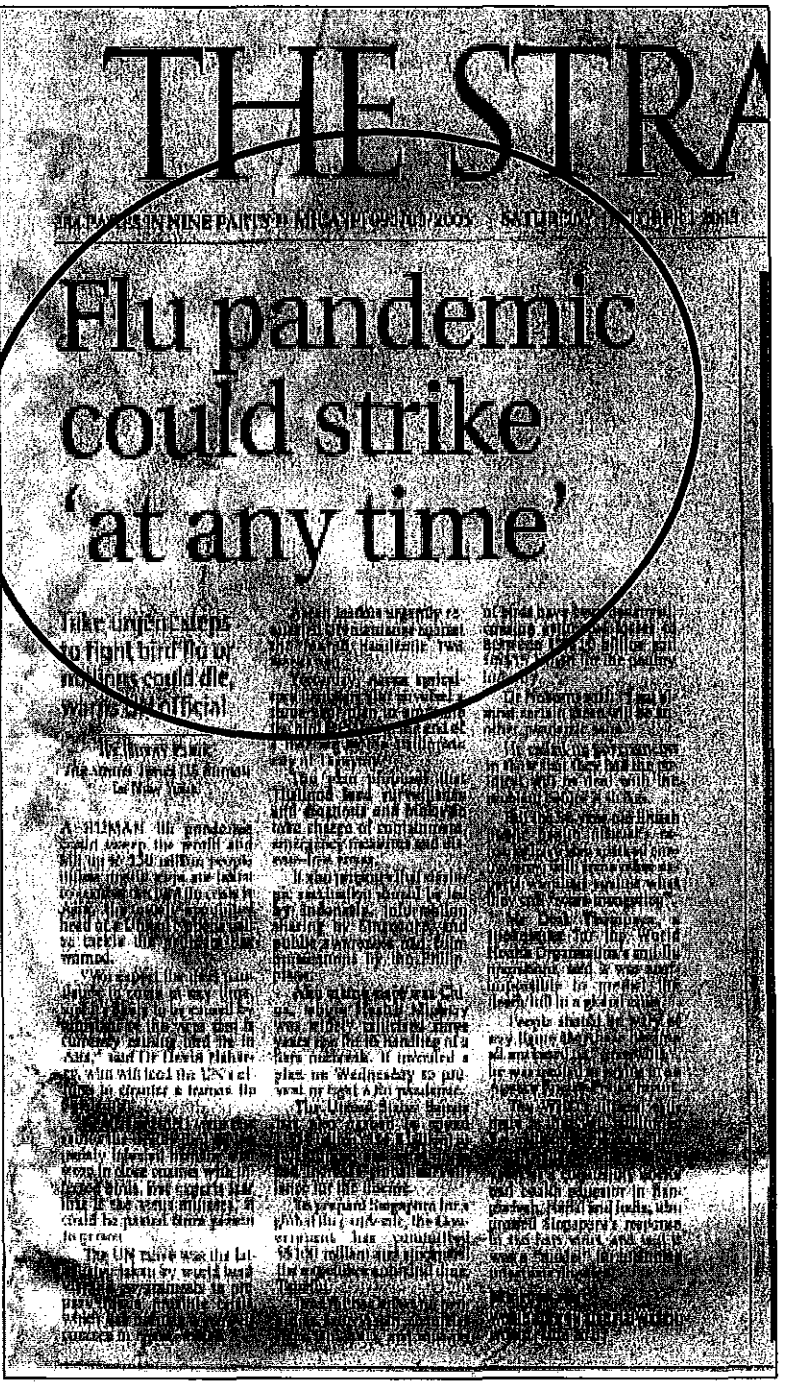
ISSUE 20 www.magnachem.com.sg NOV 2005

Protect Our Soldiers from Imminent Bird Flu

The deadly **H5N1** bird flu virus has been confirmed in Romania, making its first appearance in Europe. **H5N1** has already killed more than 60 people in Asia. Experts from the World Health Organisation (WHO) explained that as the **H5N1** spreads, it could speed up its mutation into a virus that is transmitted easily among humans.

The fear is that the mutant form could trigger a flu pandemic that might kill millions. There is no question that such an outbreak will occur, it is only be a matter of when and how widespread. Already governments are stockpiling anti-viral drugs to protect their citizens in case of an outbreak.





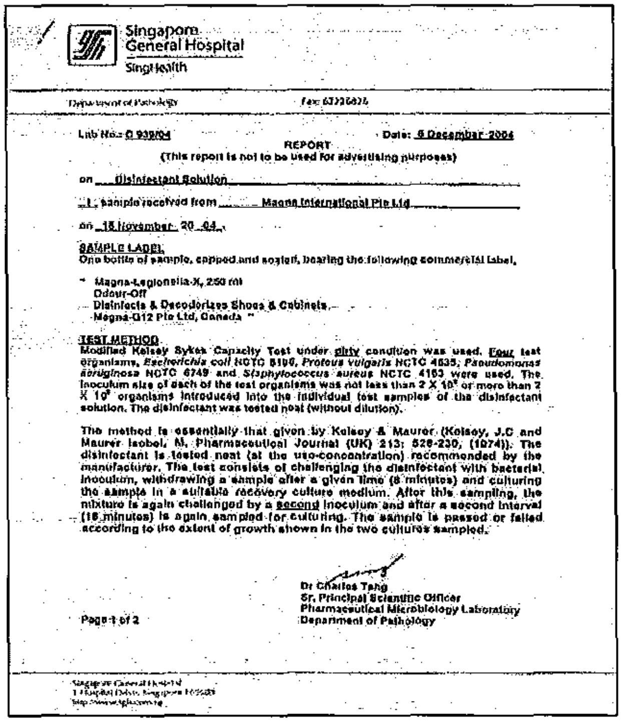
THE STRA

Flu pandemic could strike 'at any time'

Take urgent steps to fight bird flu or millions could die, warns WHO official

The Straits Times October 1, 2005

Legionella-X Powerful Disinfectants Can Protect Our Soldiers



Singapore General Hospital
SingHealth

Department of Pathology Fax: 63226826

Lab No.: O 939/04 Date: 6 December 2004

REPORT
(This report is not to be used for advertising purposes)

on Disinfectant Solution

1 sample received from Magna International Pte Ltd

on 18 November 20 04.

SAMPLE LABEL
One bottle of sample, capped and sealed, bearing the following commercial label,

" Magna-Legionella-X, 250 ml
Odour-Off
Disinfects & Deodorizes Shoes & Cabinets
Magna-G12 Pte Ltd, Canada "

TEST METHOD
Modified Kelsey Sykes Capacity Test under dirty condition was used. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant was tested neat (without dilution).

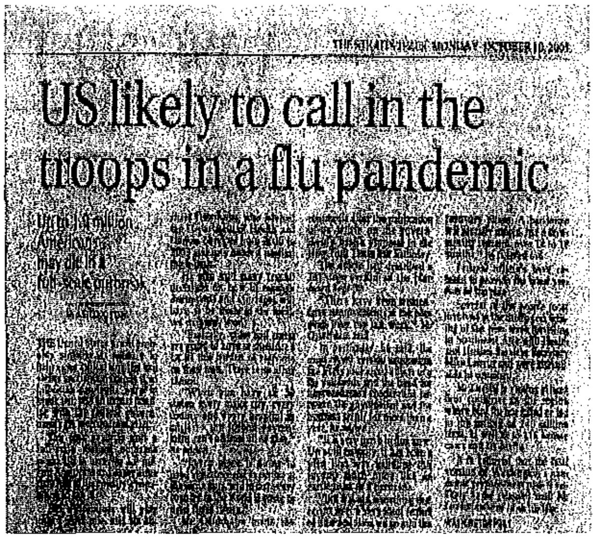
The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213; 528-230, (1974)). The disinfectant is tested neat (at the use-concentration) recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

Dr Charles Tang
Sr. Principal Scientific Officer
Pharmaceutical Microbiology Laboratory
Department of Pathology

Page 1 of 2

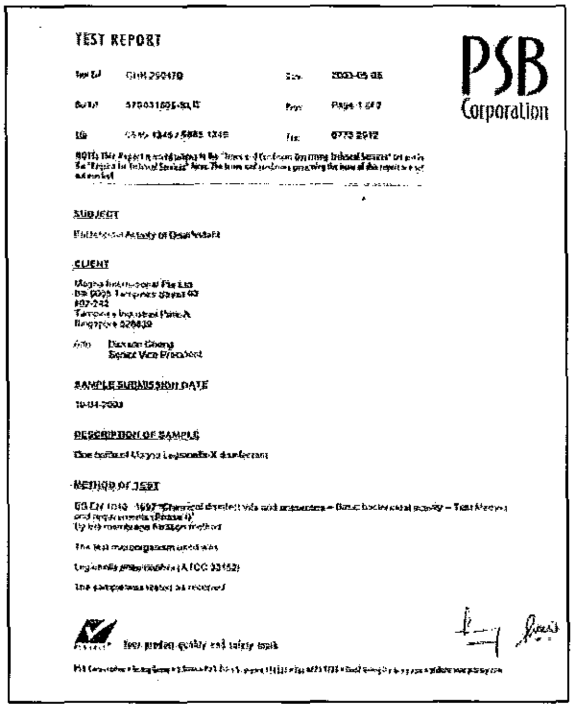
Soldiers at the Battlefront

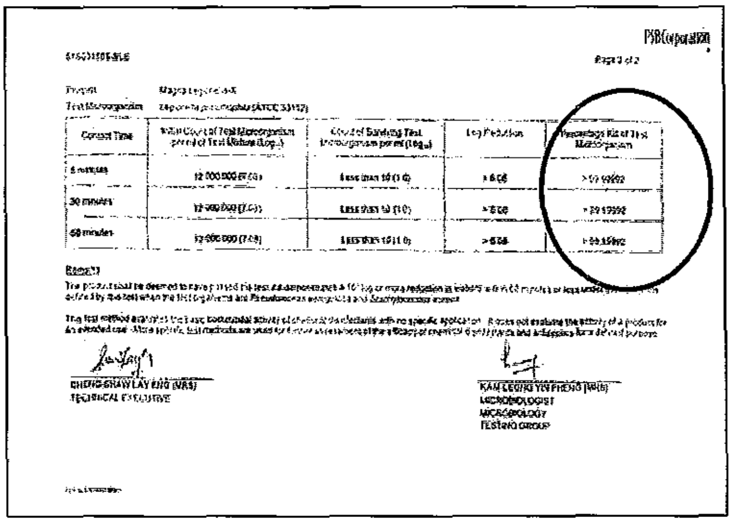
It is common knowledge that in cases of emergency, troops will be called in to control the situation. Our soldiers are at the forefront of any assault, including Bird Flu. As a corporate citizen, we feel it our responsibility to inform and offer protection in the form of air and surface disinfectants.



Top on our list is an Air Sterilizer, the **Legionella-X 100**, that is tested to eliminate airborne bacteria and viruses, including the **H5N1** virus. It emits a continuous stream of ozone at low concentrations that effectively kills bacteria and viruses and removes odours.

To complete the protection of our soldiers, we have proven Hospital Grade air disinfectant spray, hand disinfectants, surface disinfectants, and insect repellent that eliminates **99.9999%** of bacteria and viruses upon contact.





TEST REPORT

PSB Corporation

Your Ref:	CHK 290470	Date:	2003-05-05
Our Ref:	**57S031505-SLE**	Page:	Page 1 of 2
DID:	6885 1345 / 6885 1346	Fax:	6773 2912

NOTE: This Report is issued subject to the "Terms and Conditions Governing Technical Services" set out in the "Request for Technical Services" form. The terms and conditions governing the issue of this report are set out overleaf.

SUBJECT

Bactericidal Activity of Disinfectant

CLIENT

Magna International Pte Ltd
Blk 9005 Tampines Street 93
#02-242
Tampines Industrial Park A
Singapore 528839

Attn : Dickson Cheng
Senior Vice President

SAMPLE SUBMISSION DATE

10-04-2003

DESCRIPTION OF SAMPLE

One bottle of Magna Legionella-X disinfectant.

METHOD OF TEST

BS EN 1040 : 1997 "Chemical disinfectants and antiseptics – Basic bactericidal activity – Test Method and requirements (Phase I)"
By the membrane filtration method.

The test microorganism used was :

Legionella pneumophila (ATCC 33152)

The sample was tested as received.

Product : Magna Legionella-X

Test Microorganism : *Legionella pneumophila* (ATCC 33152)

Contact Time	Initial Count of Test Microorganism per ml of Test Mixture (Log_{10})	Count of Surviving Test Microorganism per ml (Log_{10})	Log Reduction	Percentage Kill of Test Microorganism
5 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992
30 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992
60 minutes	12 000 000 (7.08)	Less than 10 (1.0)	> 6.08	> 99.99992

Remarks

The product shall be deemed to have passed the test if it demonstrates a 10^5 log or more reduction in viability within 60 minutes or less under the conditions defined by this test when the test organisms are *Pseudomonas aeruginosa* and *Staphylococcus aureus*.

This test method evaluates the basic bactericidal activity of chemical disinfectants with no specific application. It does not evaluate the activity of a product for an intended use. More specific test methods are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

CHENG-SHAW LAY ENG (MRS)
TECHNICAL EXECUTIVE

KAM-LEONG YIN PHENG (MRS)
MICROBIOLOGIST
MICROBIOLOGY
TESTING GROUP

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 284/03 Date: 24 July 2003

REPORT

(This report is not to be used for advertising purposes)

on Disinfectant Spray

1 sample received from Magna International Pte Ltd

on 15 July 20 03 .

SAMPLE LABEL

One bottle of sample, capped and sealed, bearing the following commercial label,

" Magna-Legionella-X, 500ml
Viral-Free
Multi-Purpose Disinfectant & Cleaner
Active Ingredients: Ethyl Alcohol, Pine Oil, Benzalkonium Chloride Solution, Nonylphenol Polyethylene Glycol Ether
Magna-G12, Canada "

TEST METHOD

Modified Kelsey Sykes Capacity Test Option for Hospital Grade Disinfectant under dirty conditions. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant sample was tested neat.

The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213: 528-230, (1974)). The disinfectant is tested at the use-concentration recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

Dr Charles Tang
Sr. Principal Scientific Officer
Pharmaceutical Microbiology Laboratory
Department of Pathology

Singapore General Hospital
1 Hospital Drive, Singapore 169608
http://www.sgh.com.sg

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 284/03

REPORT

TEST RESULT

SAMPLE: " Magna-Legionella-X, Viral-Free, Multi-Purpose Disinfectant & Cleaner "

TEST CONCENTRATION: Neat

***ESCHERICHIA COLI* NCTC 8196**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***PROTEUS VULGARIS* NCTC 4635**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***PSEUDOMONAS AERUGINOSA* NCTC 6749**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***STAPHYLOCOCCUS AUREUS* NCTC 4163**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

Note: + : Growth in one tube of recovery broth
\- : No growth in one tube of recovery broth

Dr Charles Tang
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Pharmaceutical Microbiology Laboratory
Department of Pathology

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http://www.sgh.com.sg

Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 294/03 Date: 7 August 2003

REPORT
(This report is not to be used for advertising purposes)

on Disinfectant Spray

1 sample received from Magna International Pte Ltd

on 30 July 20 03 .

SAMPLE LABEL

One disinfectant sample in a spray bottle, capped, sealed and bearing the following commercial label,

" Magna-Legionella-X, 500ml
Wonder-Kleen
Antibacterial Waterless Stain Remover for Sofas and Fabrics
Magna-G12, Canada "

TEST METHOD

Modified Kelsey Sykes Capacity Test Option for Hospital Grade Disinfectant under dirty conditions. Four test organisms, *Escherichia coli* NCTC 8196, *Proteus vulgaris* NCTC 4635, *Pseudomonas aeruginosa* NCTC 6749 and *Staphylococcus aureus* NCTC 4163 were used. The inoculum size of each of the test organisms was not less than 2 X 10^8 or more than 2 X 10^9 organisms introduced into the individual test samples of the disinfectant solution. The disinfectant sample was tested neat.

The method is essentially that given by Kelsey & Maurer (Kelsey, J.C and Maurer Isobel, M. Pharmaceutical Journal (UK) 213: 528-230, (1974)). The disinfectant is tested at the use-concentration recommended by the manufacturer. The test consists of challenging the disinfectant with bacterial inoculum, withdrawing a sample after a given time (8 minutes) and culturing the sample in a suitable recovery culture medium. After this sampling, the mixture is again challenged by a second inoculum and after a second interval (18 minutes) is again sampled for culturing. The sample is passed or failed according to the extent of growth shown in the two cultures sampled.

Dr Charles Tang
Sr. Principal Scientific Officer
Pharmaceutical Microbiology Laboratory
Department of Pathology

Singapore General Hospital
1 Hospital Drive, Singapore 169608
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Singapore General Hospital
A Tradition of Caring & Excellence

Department of Pathology Fax: 2226826

Lab No.: C 294/03

REPORT

TEST RESULT

SAMPLE: " Magna-Legionella-X, Wonder-Kleen, Antibacterial Waterless Stain Remover for Sofas and Fabrics "

TEST OPTION: Hospital Grade Disinfectant

TEST CONCENTRATION: Neat

***ESCHERICHIA COLI* NCTC 8196**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***PROTEUS VULGARIS* NCTC 4635**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***PSEUDOMONAS AERUGINOSA* NCTC 6749**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8MINS	18 MINS	REMARK
24 HRS	+ + / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

***STAPHYLOCOCCUS AUREUS* NCTC 4163**

INCUBATION TIME	POSITIVE/NEGATIVE CONTROLS	SAMPLING/EXPOSURE TIME 8 MINS	18 MINS	REMARK
24 HRS	+ - / - -	- - - - -	- - - - -	
48 HRS	+ + / - -	- - - - -	- - - - -	Pass

Note: + : Growth in one tube of recovery broth
- : No growth in one tube of recovery broth

Dr Charles Tang
Sr. Principal Scientific Officer
Pharmaceutical Microbiology Laboratory
Department of Pathology

Singapore General Hospital
1 Hospital Drive, Singapore 169608
http://www.sgh.com.sg

Indo Pos, Tuesday, 13 May 20118, Front Page

Magna Legionella-X Disinfectant Effectively Kills Avian Flu Virus

Avian flu virus (H5N1) is still a threat for community. Even though the government has continuously strives to stop this deadly virus, avian flu is still a threat. It is because there is no effective way to terminate this lethal virus.

This condition makes all experts and pharmaceutical company strive to find the killer medicine for H5N1 virus. As done by Magna International Pte Ltd.

This Singapore based company has been developing the research since 4.5 years ago when the avian flu outbreak first hit Singapore. This research resulted in Magna Legionella-X which is claimed to be the avian flu killer disinfectant.

This disinfectant is categorized as cationic detergent which contains *twin chain ammonium quaternary* that kills various viruses, fungus, especially H5N1.

"We don't want the bitter experience happened again with the widespread of this virus which have killed lots of people. We are striving to help individual, hospitals, and chicken farmer to control this pandemic." said Nelson Cheng, CEO of Magna International.

Nelson said that this product has been laboratory tested by the leading experts of IPB Bogor. The result is, 100% proven to kill H5N1.

Nelson hopes that this disinfectant can break the chain of H5N1 virus transmission. Supported by the spray-packaging that is easy to carry.

According to IPB expert, Agus Setiyono, this disinfectant can damage the virus cell membrane by reducing the surface-tension and dissolve phospholipid membrane.

Test Report

Prepared For

Magna International Pte Ltd

Attn : Mr Nelson Cheng

Job No : 10019917/05
10019917A/05

Dated 24th March 2005

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RCB No: 199404065N GST Reg No: MR-8500112-9 Member of the SGS Group

Table Of Contents

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RCB No: 199404065N GST Reg No: MR-8500112-9 Member of the SGS Group

Introduction

The purpose of the test is to ascertain the efficiency of Magna Legionella-X 1000 (Air and Water Sterilizer) in removing the bacteria in water and an enclosed environment.

A comparative study of the air quality of a room measuring 4m X 4.5m X 3m located in SGS Singapore was carried out on 24th March 2005.

A similar comparative study was carried out on water before and after sterilization with Magna Legionella-X 1000.

See attached analysis reports for results.

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Magna International Pte Ltd (Job No : 10019917/05 & 10019917A/05)

Analysis Report of Magna Legionella-X 1000 for Indoor Air

Time Of Sterilization	Total Bacterial Count, Cfu/m^3 (TSA, 35°C 48 Hrs)	Method
Before Sterilization	29	Biotest RCS Centrifugal Air Sampler Brochure
2 minutes	15	Biotest RCS Centrifugal Air Sampler Brochure

Note: Magna Legionella-X 1000 was switched on for only 2 minutes before inspection of the agar strip.

Remarks : From the results obtained, it is believed that the total bacterial count would have been further reduced if the tests had continued.

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Magna International Pte Ltd (Job No : 10019917/05 & 10019917A/05)

Analysis Report of Magna Legionella-X 1000 for Water

Time Of Sterilization	Total Bacterial Count, Cfu/m^3 (TSA, 35°C 48 Hrs)	Method
Before Sterilization	3,080,000 cfu/ml	Apha 9215B
10 minutes	20 cfu/ml	Apha 9215B
20 minutes	<1 cfu/ml	Apha 9215B
30 minutes	<1 cfu/ml	Apha 9215B
60 minutes	<1 cfu/ml	Apha 9215B

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Conclusion

By comparing results before and after activation of Magna Legionella-X 1000, the following findings were observed :

a) **Air**

Approximately 48% reduction in total bacterial count after activation of Magna Legionella-X 1000 for two (2) minutes.

b) **Water**

i) Approximately 99.999% reduction in total bacterial count after activation of Magna Legionella-X 1000 for 10 minutes.

ii) Approximately 99.9999% of reduction in total bacterial count after activation of Magna Legionella-X 1000 for 20 minutes.

iii) Approximately 99.9999% of reduction in total bacterial count after activation of Magna Legionella-X 1000 for 30 minutes.

iv) Approximately 99.9999% of reduction in total bacterial count after activation of Magna Legionella-X 1000 for 60 minutes.

SGS TESTING & CONTROL SERVICES SINGAPORE PTE LTD

LABORATORY

CHUA SIEW LI
MICROBIOLOGIST

SGS Testing & Control Services Singapore Pte Ltd | 26 Ayer Rajah Crescent #03-07 Singapore 139944 t +65 6778 1550 f +65 6779 0527 www.sgs.com
RCB No: 199404065N GST Reg No: MR-8500112-9 Member of the SGS Group

Examination Report of Efficacy Magna Legionella-X
To Avian Influenza Virus H5N1

Composition of Magna Legionella-X

Twin-chain quaternary ammonium

Indication

Magna Legionella-X effectively kill bacterium, fungal, and virus including Avian Influenza virus H5N1

Dose and administration

Directly spraying or fogging with dilution in distilled water (1:1)

Produced by	: Magna International Pte Ltd Blk 9005 Tampines street 93, #02-242 Tampines Indutrial Park A, Singapore 528839
Place test	: Division of Pathology Department of Clinic, Reproduction and Pathology Faculty of Veterinary Medicine, Bogor Agricultural University
Time	: March 2008
Responsible Person of Test	: Agus Setiyono DVM, MS, PhD

Bogor, March 24th 2008

Examinator of Test

Abadi Sutisna DVM, MSi
NIP. 130 422 700

Responsible Person of Test

Agus Setiyono DVM, MS, PhD
NIP. 131 760 847

Approved by
Dean of Faculty of Veterinary Medicine
Bogor Agricultural University

DR. Wayan Teguh Wibawan DVM, MS
NIP. 131 129 900

Test Report of Magna Legionella-X against Avian Influenza H5N1 Virus

1.1 Purpose

The purpose of the test is to ascertain the efficacy of Magna Legionella-X against Avian Influenza H5N1 virus.

1.2 Observation Parameter

The test parameter is based on the observation of the percentage of death virus after the introduction of Magna Legionella-X disinfectant.

2. Test Method

Using Isolated AI H5N1 virus from Tasikmalaya 2005, collected from Microbiology Department of Faculty of Veterinary Medicine, Bogor Agricultural University (IPB). The test was done in the unit of the Integrated Services of Medical Microbiology, Faculty of Veterinary Medicine, IPB. Five live egg embryos Specific Pathogen Free (SPF) were used as medium for the test.

Test Procedure

Three components were used; AI H5N1 Virus, Live Egg Embryos and Magna Legionella-X 100% concentration. The preparation of the disinfectant solution was done by diluting 1 part of Legionella-X to 1 part distilled water by weight. Subsequently, 2 ml of AI H5N1 Virus (10^{9} EID_{50}) was introduced into the solution of Legionella-X and then the mixture was incubated for 15 minutes at 37°C. 0.2 ml of said mixture was then injected into 11 days old live embryo via allantois and kept in the incubator at 37°C, observation was then carried out daily till the death of embryo. The liquid of the allantois was taken out for rapid test HA/HI using AI standard serum.

3. Results

Based on observation all the embryos died two days after the injection Magna Legionella-X and H5NI mixture. The liquid from the allantois of the death embryo was then taken for rapid test HA/HI using AI standard serum. The results as tabulated below:

Table1. The Efficacy Result of Magna Legionella-X against AI H5NI Virus

Concentration	Dilution	Percentage of Inactive Virus AI H5N1 (%)
100	1:1	100

Based on Table 1, Magna Legionella-X with the dilution of 1: 1 has the ability to inactivate 100% of AI H5NI virus. The test shown that Magna Legionella-X at a dilution ratio of 1:1 is highly effective against said virus.

4. Conclusion

Based on the said efficacy test of Magna Legionella-X against Avian Influenza AI H5N1 Virus. the said disinfectant is effective to inactivate 100 %AI H5N1 Virus at concentration with a dilution 1:1

5. Reference

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Brander, G.C. Pugh, D.M. Bywater, R.J and Jenkins,W.L. 1991. Drug and Therapeutics. 6th Ed. Bailliere Tindal, London.

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News

IPB Appointed to Examine Magna Legionella-X Product

Jumat, 23 Mei 2008
The Faculty of Veterinary, Bogor Agricultural University, has been appointed by Magna International Pte.Ltd. to conduct examination of disinfectant product Legionella-X. "The President of MIS, Nelson Cheng, through a candidate of animal medicine distributor at Jakarta, has requested that IPB conduct the examination of the capability of Legionella-X disinfectant towards H5N1 virus. The test result would be enclosed as one of qualifications to obtain permission of the product to be sold at Indonesia," said Dr. drh. Agus Setiyono, M.S. on Tuesday (13/5) at the room of Pathology Division of Faculty of Veterinary, Bogor Agricultural University. After went through several examinations at the laboratory, Legionella-X was proven to kill 100% of avian influenza H5N1 virus.

Legionella-X is a disinfectant that kills avian flu virus, developed by Magna International. Magna has been developing Legionella-X since 4.5 years ago, when SARS virus was first attacked Singapore.

The examination was conducted by using strain of Avian Influenza virus H5N1 which was placed in TET (Sprouted Embryo Egg) media which was given Legionella-X with 100% concentrate as the main ingredient of the tested medicine. The examination was held by Medical Microbiology Research Team, Department of Animal Diseases and Veterinary Society Health, Faculty of Veterinary, Bogor Agricultural University.

Legionella-X has also been tested at several trains and hospitals at Singapore. This disinfectant is hoped to be able to cut the chain of H5N1 virus spread, because of its easy-to-carry package, and its spray method of use which is very simple. It is highly practical, efficient, and easy to use everywhere.

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IPB Electronic Journal

LCMS IPB
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LMS IPB
IPB Courseware

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Other News

- The 6th STUDIUM GENERALE IN LANDSCAPE ARCHITECTURE DEPARTMENT, FACULTY OF AGRICUTURE, IPB (Senin, 12 Mei 2008)
- Grant of Computer and Software from ASIA-LINK, FORRSA Project for Forestry Faculty (Senin, 4 Februari 2008)
- Lecturers of Forestry Faculty participated in Training Course on the Ecological Restoration (RE_2) of the ASIA-LINK Forest Rehabilitation of South East Asia (FORRSA) Project (Rabu, 30 Januari 2008)
- The Importance of Agriculture Entrepreneurial Education In Indonesia : From Vision to ActionÃ‚Â¢Ã¢Â€Â“Ã‚Â (Selasa, 11 Desember 2007)
- Regional Symposium On Biophisics And Medical Phisics (Jumat, 30 November 2007)
- Agribusiness Development Centre University Farm IPB, opened on, 24 Oktober 2007 (Rabu, 7 November 2007)
- Five Universities in Southeast Asia and East Asia celebrates IPB's Anniversary, (Rabu, 24 Oktober 2007)
- Characterization of habitat, Morphology, Genetic and hatching technology improvement by Ex Situ of Maleo Bird Egg (Selasa, 2 Oktober 2007)
- FISHERMAN RESOURCE QUALITY ENHANCEMENT, Case Small fisherman at muara Angke Fishery Port Province DKI Jakarta (Selasa, 25 September 2007)
- Students of IPB, as an Indonesian representative, participate in Satu Summit On Business Plan Competition, Thailand. Thurday, 30 August 2007 (Rabu, 12 September 2007)

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INDO·POS
Sudut Pandang Jakarta

Disinfektan Magna Legionella-X Efektif Bunuh Virus Flu Burung

VIRUS flu burung (H5N1) masih menjadi momok masyarakat. Sekalipun pemerintah terus berupaya menghentikan virus mematikan ini dengan kerja keras, flu burung tetap jadi ancaman. Pasalnya, belum ada cara efektif membasmi virus mematikan ini.

Kondisi tersebut membuat para pakar dan perusahaan farmasi berupaya mencari obat pembunuh virus H5N1. Seperti yang dilakukan Magna International Pte Ltd.

Perusahaan Singapura ini mengembangkan penelitian sejak 4,5 tahun lalu ketika negara itu dilanda virus flu burung. Hasil penelitian itu menghasilkan Magna Legionella-X yang diklaim sebagai disinfektan pembunuh virus flu burung.

Disinfektan ini tergolong detergen kationik mengandung *poly chain ammonium kuartener* yang bisa membunuh berbagai virus, jamur terutama H5N1.

"Kita tak ingin kejadian pahit terulang lagi dengan menyebarnya virus yang membunuh banyak orang. Kita berupaya membantu individu, rumah sakit dan peternak ayam mengendalikan pandemi ini," kata CEO Magna International Nelson Cheng.

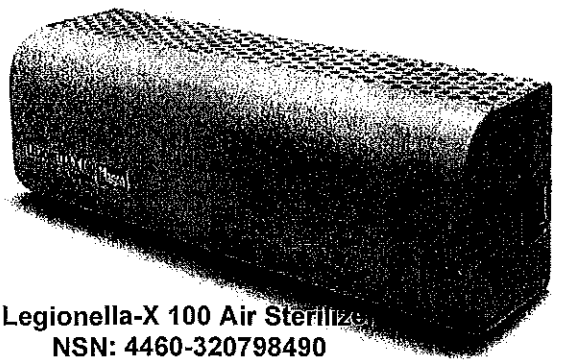
Nelson mengatakan produk ini telah diuji laboratorium oleh pakar-pakar terkemuka dari IPB Bogor. Hasilnya, terbukti bisa 100 persen membunuh H5N1.

Nelson menghharapkan disinfektan ini mampu memutus rantai penularan virus H5N1. Karena,

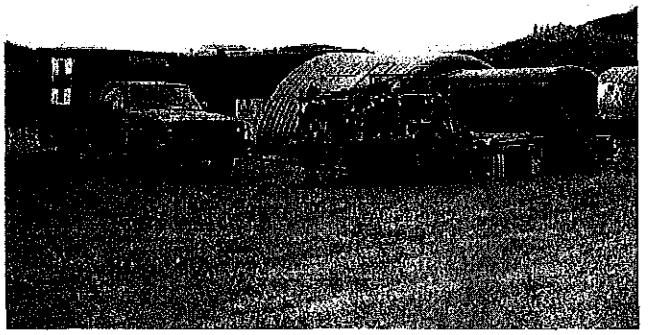
kemasan yang mudah dibawa dengan cukup menyemprotkan saja.

Menurut pakar IPB Agus Setiyono, disinfektan ini bisa merusak membran sel virus dengan cara menurunkan tegangan permukaan dan melarutkan membran pospholipida. (FOG)

The **Legionella-X 100 Air Sterilizer** generates ozone using an ultraviolet lamp. Ozone, a colourless gas, is a powerful oxidising agent. As a disinfectant, the rate of bacteria killed by ozone is 3000 times faster than chlorine. The Legionella-X 100 emits a continuous stream of ozone at a low concentration of 0.05 ppm that is suitable for residences and compact areas. For large rooms and halls, two or more units may be installed.

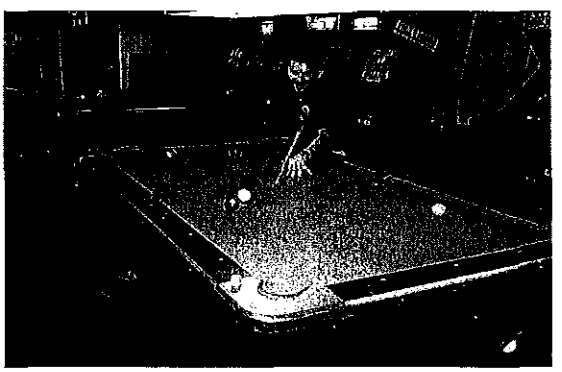


Legionella-X 100 Air Sterilizer
NSN: 4460-320798490



Areas of Use

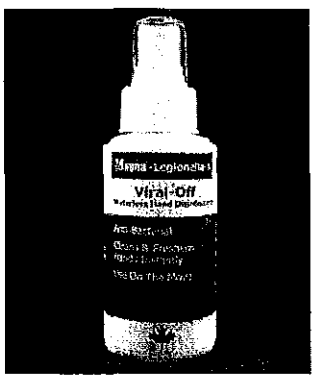
Use the **Legionella-X 100** to disinfect and freshen areas frequented by many. These are typically places with sources of bacteria and odour from boots, socks, sweat, perfume and cigarette smoke odour, such as Army Camps, Recreation Rooms and Locker Rooms, Garbage Centres, Washrooms and Field Hospitals.



Handy Waterless Hand Disinfectants

Bacteria stay alive for days on contact surfaces. Soldiers need to put up the best defence all around them, beginning with keeping their hands clean and germ-free. In instances where soap and water are not readily available, your best defence lies in **Legionella-X Viral-Off,** a waterless disinfectant for the hands. Used correctly, its powerful formula kills 99.9999% of bacteria and viruses found on the hands. Hands feel cool, smooth and fresh, with no sticky after-feel.

Be prepared. Carry handy, portable **Viral-Off** with you everywhere. Use it after touching tabletops, keyboards, lift buttons, railings, escalators, doorknobs and handles.

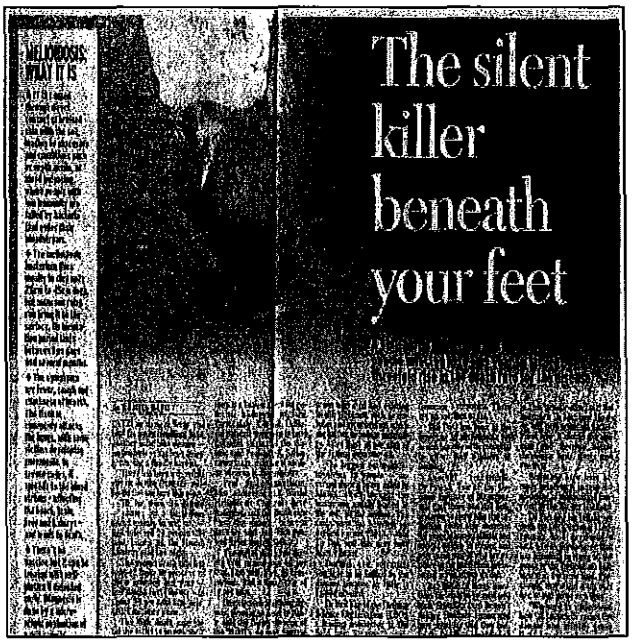


Legionella-X Viral-Off
NSN: 6840-320775677

Prevent Melioidosis and Athlete's Foot

The action of bacteria on perspiration in shoes and boots causes strong odours. These bacteria multiply fast, often leading to conditions such as smelly feet, Athlete's Foot and nail infections. Soldiers on the field and in muddy areas are exposed to bacteria in the soil that can lead to the deadly melioidosis or soil disease.

Protect our soldiers. To combat melioidosis, Athlete's Foot, and other foot fungal growth, use **Legionella-X Odour-Off**. It contains a powerful antibacterial and anti-fungal agent that kills bacteria and fungi upon contact and continues to do so for many hours thereafter, effectively removing the cause of odours. Feet and shoes remain dry and fresh, with a pleasant lingering fragrance.



The Straits Times 17 Sep 2004

Areas of Use

Use **Odour-Off** on feet and all types of footwear such as army boots, leather shoes, synthetic shoes, sports trainers, rubber shoes, canvas shoes and sandals. It is also suitable for removing odours from musty shoe cabinets, supply stores, drawers and wardrobes.

Legionella-X Odour-Off
NSN: 6840-320782231

At Magna, we are poised to handle tomorrow's challenges with agility, innovation and world-class military and commercial solutions. For a discussion, please contact Mr. Derek Siok or Mr. Nelson Cheng at Tel: (65) 6788 1228. Please fax your details to us at Fax: (65) 6786 1497. Email: magnaintl@pacific.net.sg. Alternatively you can contact Mr. James Cheng at Tel: (705) 273-3353 Fax: (705) 273-3352 Email: magna@ntl.sympatico.ca

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URL: www.topentrepreneur.com.sg

RE: THE TOP ENTREPRENEUR 2014 CAMPAIGN

Dear Mr Nelson Cheng

Congratulations on coming on board the **Top Entrepreneur 2014**!
We are pleased and honoured to have the opportunity to feature you and your esteemed company in our prestigious Campaign.

This annual Campaign showcases some of the most outstanding personalities in the world of Business in Singapore, from across diverse industries and disciplines. Through this platform, we recognize the excellence and achievements of this group of exceptional and successful individuals as well as celebrate their stories and legacies.

The **Top Entrepreneur** is more than just a title. You embody the essence of enterprise, success, hard work, integrity and business excellence and we are certain that your participation in our Campaign will not only lend this year's cohort a greater presence but will also serve to inspire budding entrepreneurs to follow in your footsteps toward fulfilling their dreams.

It is with this singular vision that the **Top Entrepreneur** Campaign was first conceived. We trust that through this Campaign, many lives will be touched and inspired by the compelling stories of success, creativity, courage, determination and diligence – and be spurred on to reach for ever greater heights.

We wish you and your esteemed company continued success in your business and may 2014 prove to be an even more fruitful year ahead. For further enquiries, kindly contact our Senior Media Executive, Ms. Alecia Tan, at +65 6352 8971.

Sincerely yours,

Ms Priscilla Tan
Director, Campaign Advisory Board
Top Entrepreneur 2014

TOP 10
SPECIAL ACHIEVEMENT AWARDS
* * *
INNOVATION AWARD

INNOVATION–FUELLED SUCCESS

NELSON CHENG Magna International Pte Ltd

In Mr Nelson Cheng's office conference room, the gleaming certificates of patents and trademarks line the walls – overwhelming evidence that the founder of local chemical company Magna International has led a very productive life. Arguably one of Singapore's most prolific inventors, Mr Cheng's unceasing appetite for innovation has propelled his company – started 21 years ago – into a worldwide leader in the field of corrosion-preventive technology, heat-activated lubricant technology and cleaning surfactants.

Music helps Mr Cheng focus. "Playing the guitar helps with my thought process and inspiration for ideas," says the radiant-looking gentleman of his inventive exploits. But lest one thinks it's as easy as turning on a switch, he cautioned that hard work and dedication form the bulwark of his business.

Under the Magna umbrella, Mr Cheng has overseen phenomenal growth that now includes Magna International, Magna Far East Chemical, Magna Australia Pte Ltd, Lupromax International Pte Ltd and Magna Chemical Canada. Two of his brothers are also in the Magna Group, with one in charge of the Canadian factory. The company's overall research and development efforts are also a sight to behold, as Mr Cheng pushes his team to scale ever-greater heights in their development of new products and added value to existing ones.

Magna's core products are marketed under three flagship brands – Vappro, Lupromax and Corpro. Vappro, which stands for Vapour-Phase-Protection, consists of state-of-the technology in the area of corrosion inhibitors that are used by customers all over the world, from electronics to the automotive industries to packaging giants and computer juggernauts. Lupromax, on the other hand, is a comprehensive line of industrial lubricants and oil additives designed for optimal operating levels, while Corpro is marketed as an absolute essential for formulating specialty chemical products.

Ever mindful of the environment, Mr Cheng is also a strong proponent of green technology. Besides its most famous technology, the patented HAT (heat activated technology), Magna has also pioneered a separate division that uses biodegradable raw materials to create eco-friendly, bio-lubricant products.

"True success should lead us to feed the hungry, clothe the naked and house the orphaned"

Up Close & Personal

Name a quality that all entrepreneurs should have in order to succeed.
Having the ability to see things that do not yet exist. You should be able to project a positive result despite the presence of problems and obstacles. It provides a motivating force that propels you forward.

What would be a lesson in business that you have kept in mind?
I've personally learnt that if you truly believe in what you do, it pays off if one has the courage to take an educated plunge forth.

More often than not, partnerships don't last. Instead, commit to your goals wholeheartedly and stay focused. After all, being in business is not so different from farming – you reap what you sow.

After 21 years of success, are you looking forward to another 21?
We are planning to get PT Magna Indonesia listed in the home country, because we are marketing our products aggressively there and have been very well-received. Currently, more than 9,000 outlets carry our products. I believe that the only way to compete is to produce where the market expansion is, and right now, Indonesia is the place to be.

What is a unique feature of Magna that you are proud of?
Our adaptability to the ever-changing business environment. The fact that we are a small company means that we can respond to market requests very quickly and efficiently. We can reformulate a particular product quickly without going through too much red tape. So what seems like a weakness is actually a strength that we have been able to use to our advantage.

Fast and fluid

Efficiency helps Magna International gain footing worldwide

PHOTO: CHONG JUN LIANG

Joyce Lin

MR NELSON Cheng (above), 57, president and CEO of Magna International recounts how his company recently responded to a client's request for a new formulation of one of its top selling fuel additives, Lupromax, to enhance its petrol index.

Magna managed to produce a 20-footer container within a week, which would have been difficult for a larger company. Mr Cheng says: "Our quick response and adaptability to changes sets us apart from larger competitors."

Magna International is a manufacturer of specialty chemical products, vapour corrosion inhibitors (VCI) and lubricant additives. It is a recipient of the Top 10 Special Achievement — Innovation Award at this year's Promising SME 500.

Established in 1992 by Mr Cheng, Magna International has become one of the world's most recognised names in the specialised field of corrosion-preventive technologies, cleaning surfactants and sustainable lubricant additives.

Magna's products are used by the oil and gas, marine, shipping, electronics, aviation, metalworking and defence industries worldwide.

To overcome manpower and space constraints, it carries out production in its respective markets via a licensing programme in Finland, Sweden, Korea, China, Taiwan, Indonesia, India, Malaysia, Thailand, Canada, United States, Mexico and Argentina.

Today, it is a market leader in Singapore with an estimated 90 per cent of market share for its vapour corrosion inhibitor (VCI) products.

In Malaysia, Magna International occupies approximately 55 per cent of market share, and 35 per cent in Indonesia for VCI products.

'Just in time production'

Magna International has remained efficient by practising "just in time production", whereby an actual order signals when a product should be manufactured.

This reduces inventory costs and minimises storage space. In terms of personnel training, there is regular in-house training for new products conducted on a monthly basis for employees, as well as quarterly training on safety and manufacturing processes.

All equipment is maintained regularly as stipulated by ISO 9001 regulations, and new ones are purchased to replace old machinery.

The turning point of its business came in 2000 when Magna International managed to break into the international market by developing a vapour corrosion inhibitor, Vappro, which utilised state-of-the-art technology.

The company stays ahead of the curve by listening to its clients to learn about their business problems. To differentiate itself, it manufactures products with unique features not found in competitors' products.

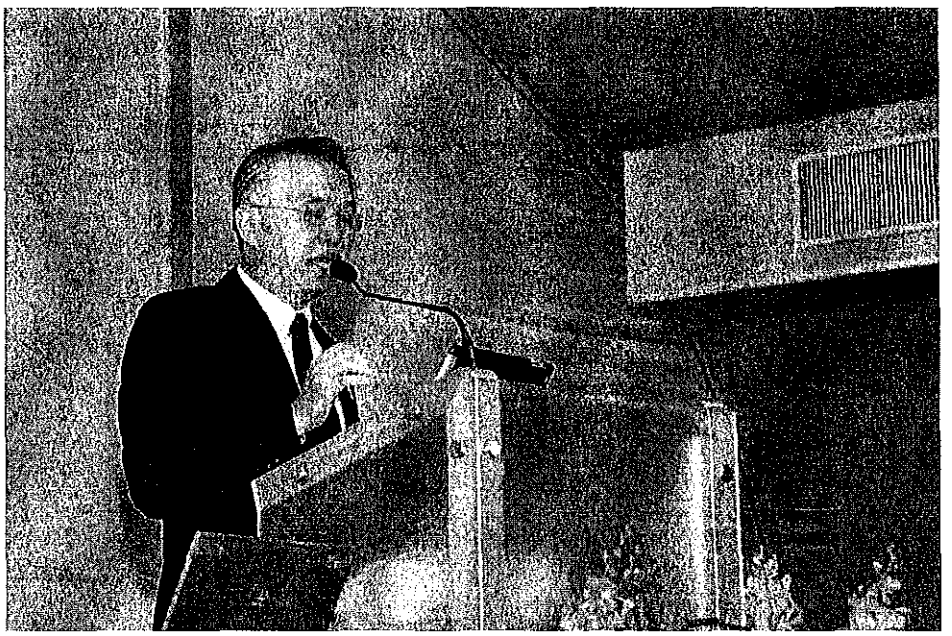
One such innovation is heat-activated technology, found in its lubricants to employ heat to enhance lubricity. Mr Cheng explains: "We find out what our clients' existing problems are and develop solutions for them. This leads to a market for our new innovations."

MAGNA INTERNATIONAL PTE LTD
www.magnachem.com.sg

MAGNA NEWS

RESTRICTED | JULY 2014 | ISSUE NO 12

Defining Innovation for the Next Generation



Magna Group President/CEO Nelson Cheng giving the Guest of Honour's message at D&T 2014

Exploring the potential of change in everyday life starts from nurturing ideas and thinking – to identify the next big wave that could start a domino effect of things new and improved. Continuing efforts in promoting innovation and industry partnerships with academia, Magna Group President/CEO Nelson Cheng spoke in the Design & Technology 2014 Awards on the importance of innovation and its pivotal role in our society and economy.

With the theme of Design Thinking in a D&T Classroom, the Design & Technology 2014 Awards provided a platform for industry partners, educators and aspiring young minds to consider and share in the context and ideas in the form of exhibits that displayed design-oriented thought processes. Selected exhibits were recognised for being outstanding in the design thinking stages of 'empathise; define; ideate; prototype and test', in tandem with the local D&T education fraternity's vision of Towards a Design Thinking Culture.

Addressing the conference as the Guest of Honour, Mr. Cheng emphasised on the need for innovation to circumvent the many challenges that arise if we are to stay ahead of global competition. "To stay relevant and to compete in the global economy, it is imperative for all organisations in

.... continue next page

"To stay relevant and to compete in the global economy, it is imperative for all organisations in Singapore to innovate, including schools, hospitals, companies, and the government."

Mr. Cheng,
Magna Group President/CEO

About Event D&T 2014

Towards A Design Thinking Culture

DESIGN & TECHNOLOGY 2014
Design Thinking in a D&T Classroom

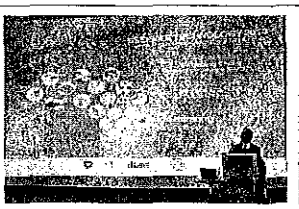
Organised by

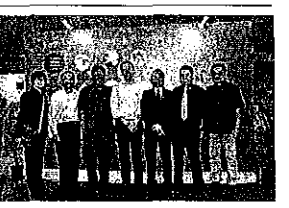
- Design & Technology Unit
  Curriculum Planning & Development Division, Ministry of Education
- Design & Technology Education Discipline
  Natural Sciences and Science Education AG, National Institute of Education/NTU
- Design & Technology Educators Society Singapore

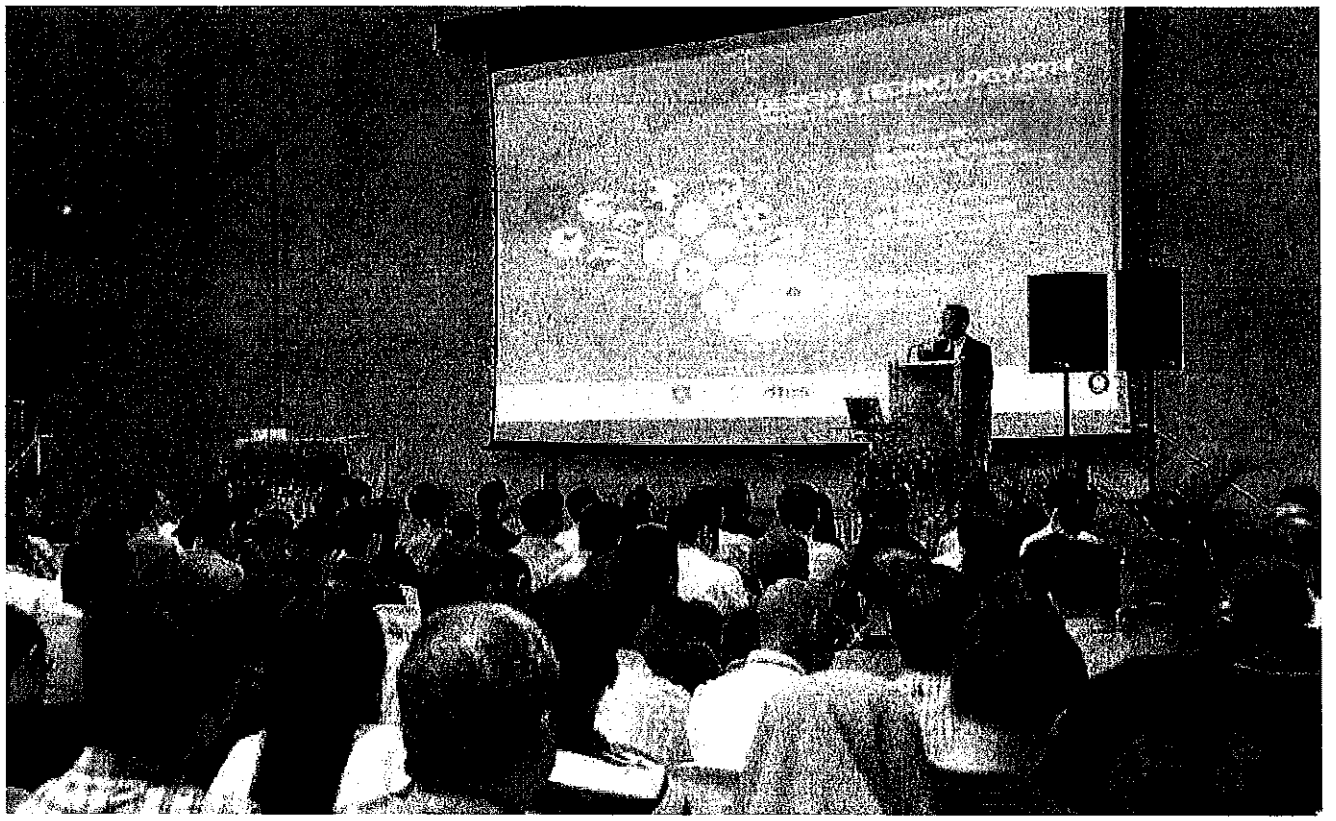
"An innovation... is a process of bringing ideas and implementing ideas as solutions in a way that may ultimately impact society positively."

Mr. Cheng,
Magna Group President/CEO

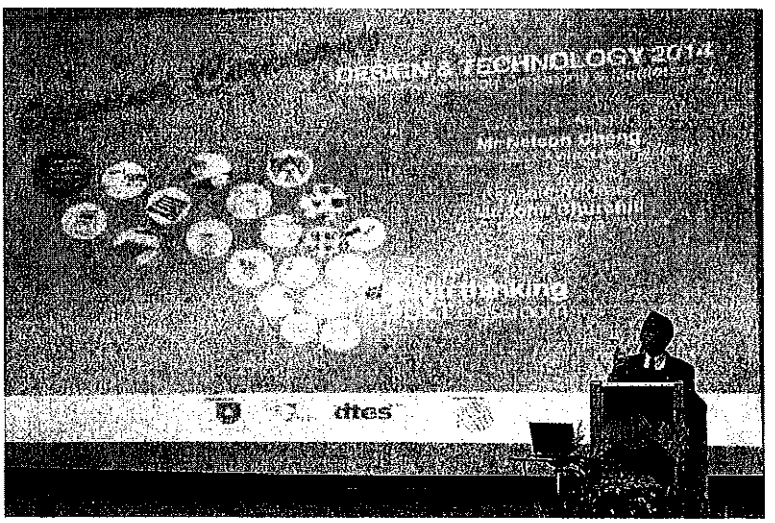
WHAT'S INSIDE







(Above & below) Mr. Cheng addressing the audience at the conference



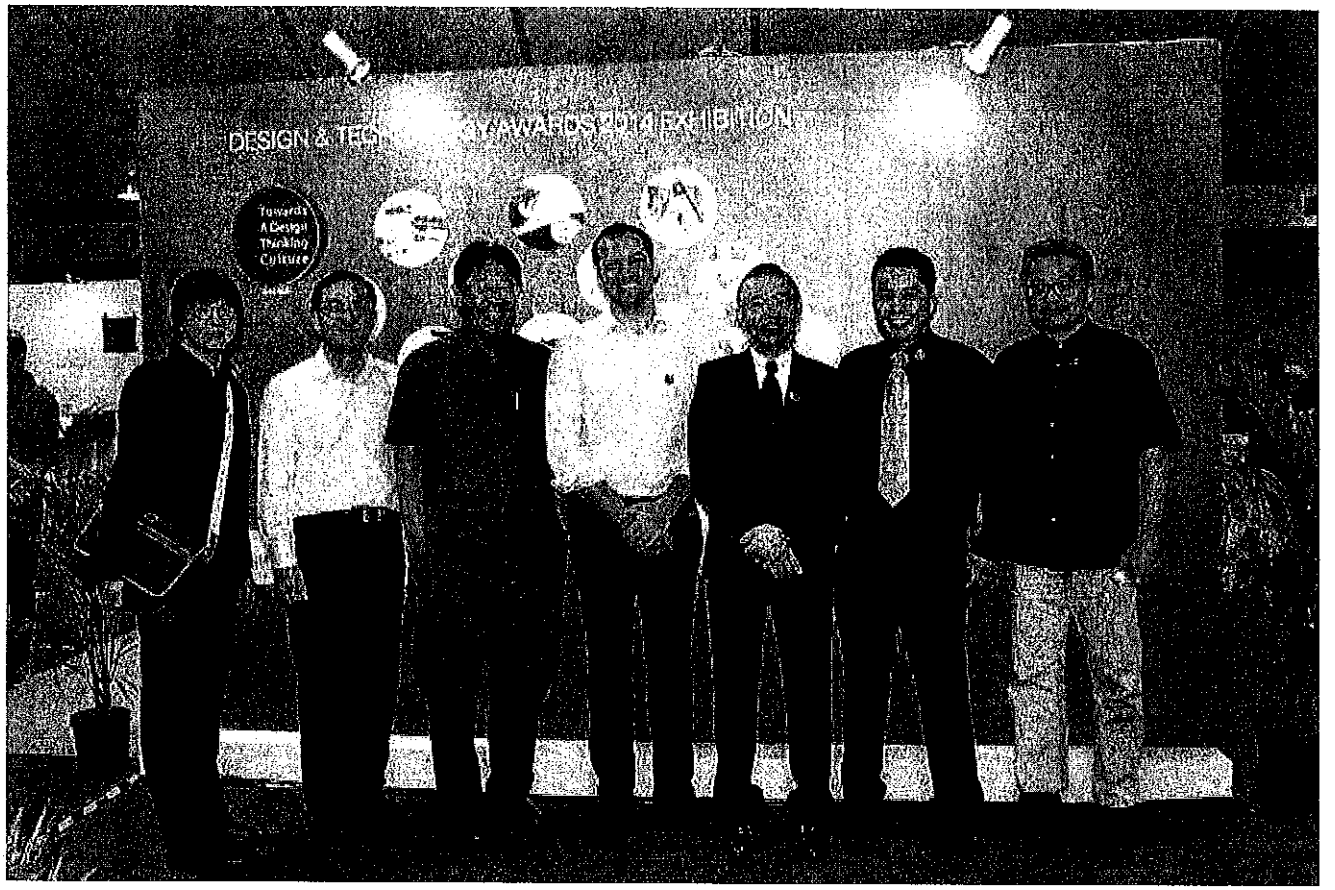
Mr. Cheng is the owner of 20 international patents and is recognised as Singapore's leading inventor.

Singapore to innovate, including schools, hospitals, companies, and the government," Mr. Cheng said. "We must develop and embrace a culture of innovation to improve efficiency, productivity, quality and competitiveness in the global market.

Elaborating on the necessity of innovation as part of evolving and adapting, Mr. Cheng added: "An innovation… is a process of bringing ideas and implementing ideas as solutions in a way that may ultimately impact society positively."

D&T 2014 participants were also encouraged to take a closer look at how best one could innovate creatively in their respective fields; to find sound answers to the question of: how can we get to the next big thing?

Viewing of award-winning exhibits



Ministry of Education officials with Keynote Speaker John Churchill & Guest of Honour Nelson Cheng

Touring the exhibit grounds

Closer inspection of an exhibit prototype

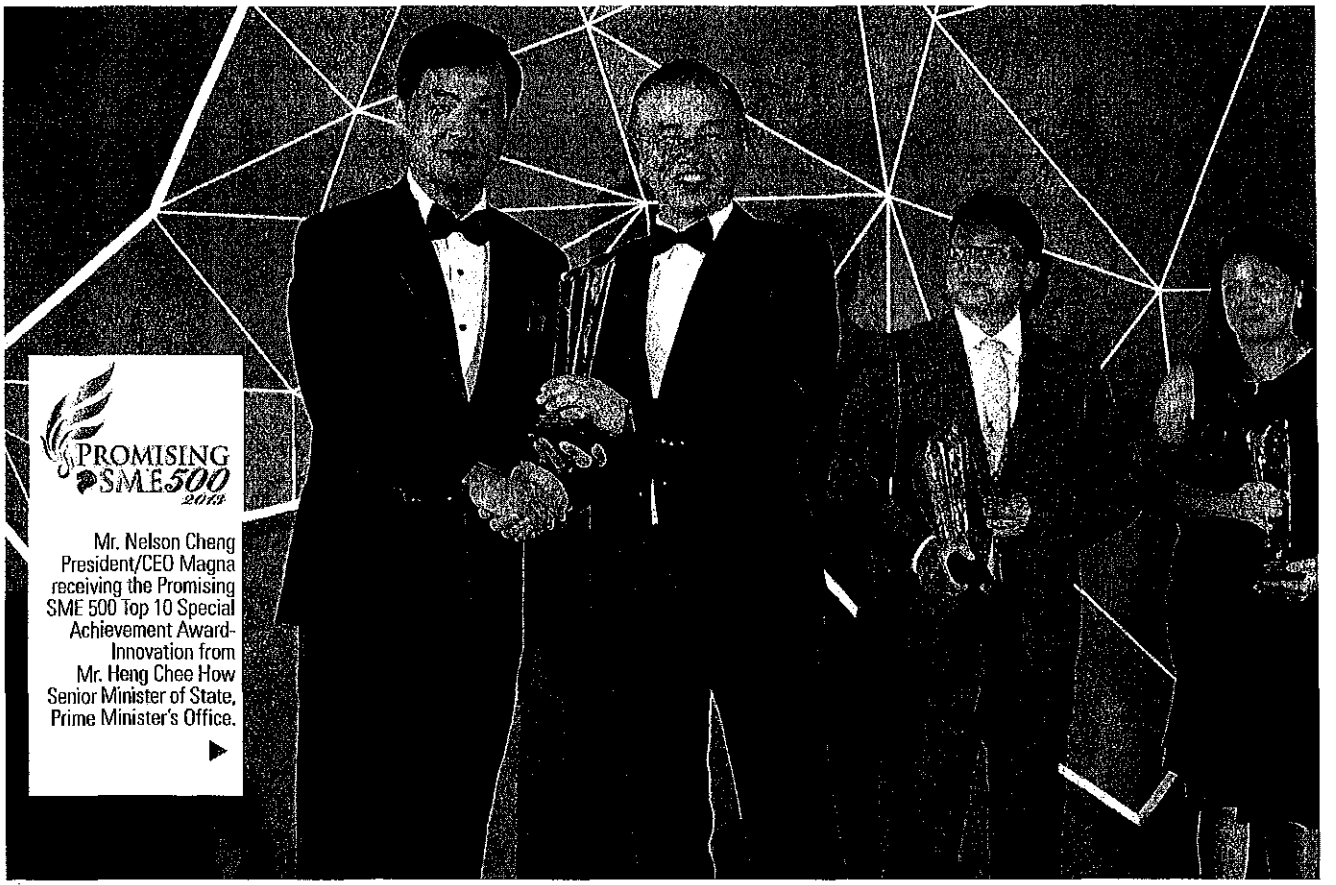
Awards presentation to recipients

Mr. Cheng sharing a light-hearted moment with a student while viewing the exhibits

MAGNA NEWSLETTER

RESTRICTED | **September 2013** | ISSUE NO 9

Singapore Promising SME 500 Top 10
Special Achievement Award-Innovation Award 2013



Mr. Nelson Cheng President/CEO Magna receiving the Promising SME 500 Top 10 Special Achievement Award-Innovation from Mr. Heng Chee How Senior Minister of State, Prime Minister's Office.

To God be the Glory, once again Magna International has been nominated by Promising SME 500 as one its top business luminaries 2013. In addition to the Top Business Luminary Award, this year Magna International has won the Top 10 Special Achievement Award-Innovation Award.

All top 10 special achievement award recipients underwent stringent selection process. The Special Achievement Award recipients went through two gruelling rounds of selection.

The first round is an internal selection based on supporting documents submitted by the business luminaries, confidential surveys and inputs from the organisers and a seven-member advisory panel made up of professionals in various industries including law, accountancy, finance and human resources.

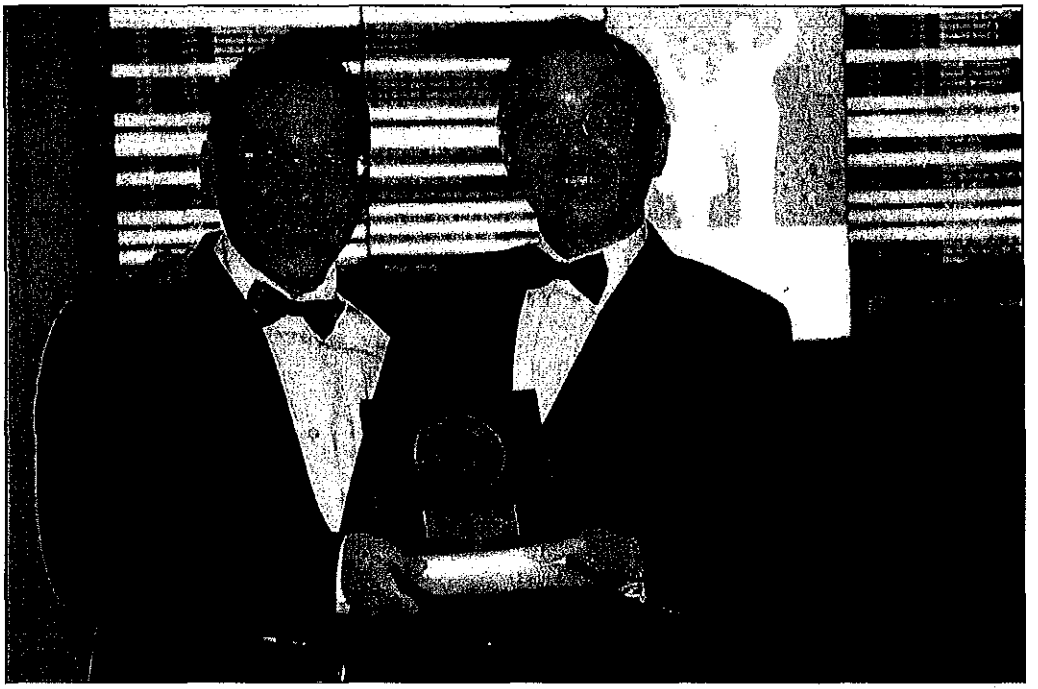
The second round involves a face-to-face interview with the advisory panel and final recipients were selected based on the company's vision and mission integration and implementation, core competencies, unique selling point, management capabilities, market research, accomplishment, accolades and milestones attained.

Promising SME 500 Award is one of the reputable business' awards in Singapore initiated by Small Medium Business Association (SMBA), to recognize and acknowledge promising small and medium business enterprises in recognition of company's achievements, good business practices, operational efficiency, leadership, sustainability, value and use of modern technology to create for customers, firm and its partners.

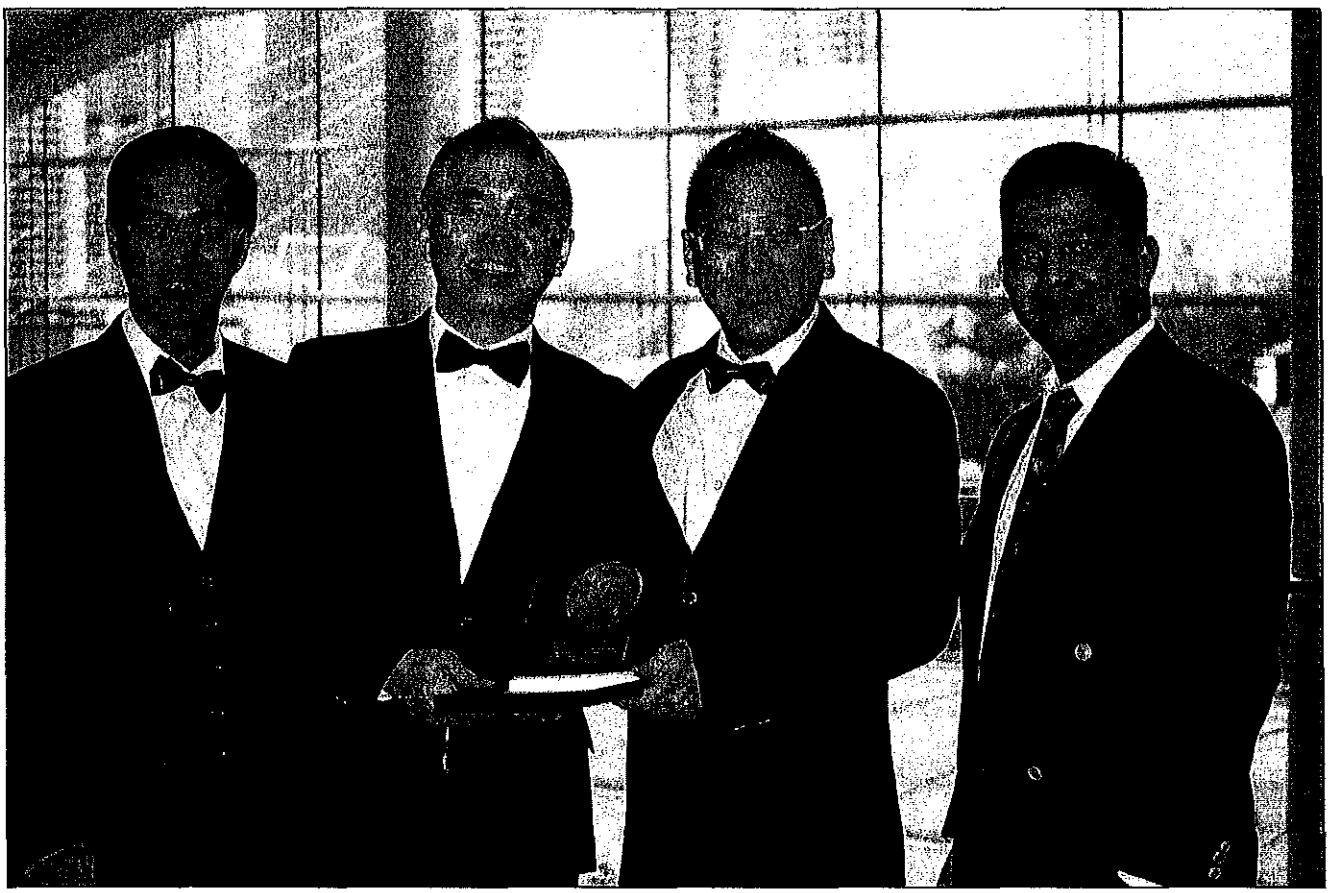
All Awardees have been carefully selected from a pool of nominations. To maintain the integrity of the selection process, SMBA board works closely with an independent Advisory Judging Panel made up from the industry top executives and consultants including law, accountancy, finance and Human Resources.. The main focus of SMBA is to recognize and acknowledge the nation top 500 promising local SMEs for deliverance of their ethics and professionalism in their business practices. Such practices will definitely bring about growth and prosperity for the economy of the nation.

We are thankful to God to have received such an honourable award and delighted to be selected as one of the top 500 winning companies in Singapore and also the first to represent Singapore Chemical Industry to receive the Top 10 Special Achievement Award-Innovation Award.
Last but not least we wish to express our heartfelt thanks to all our customers, distributors and worldwide business associates.

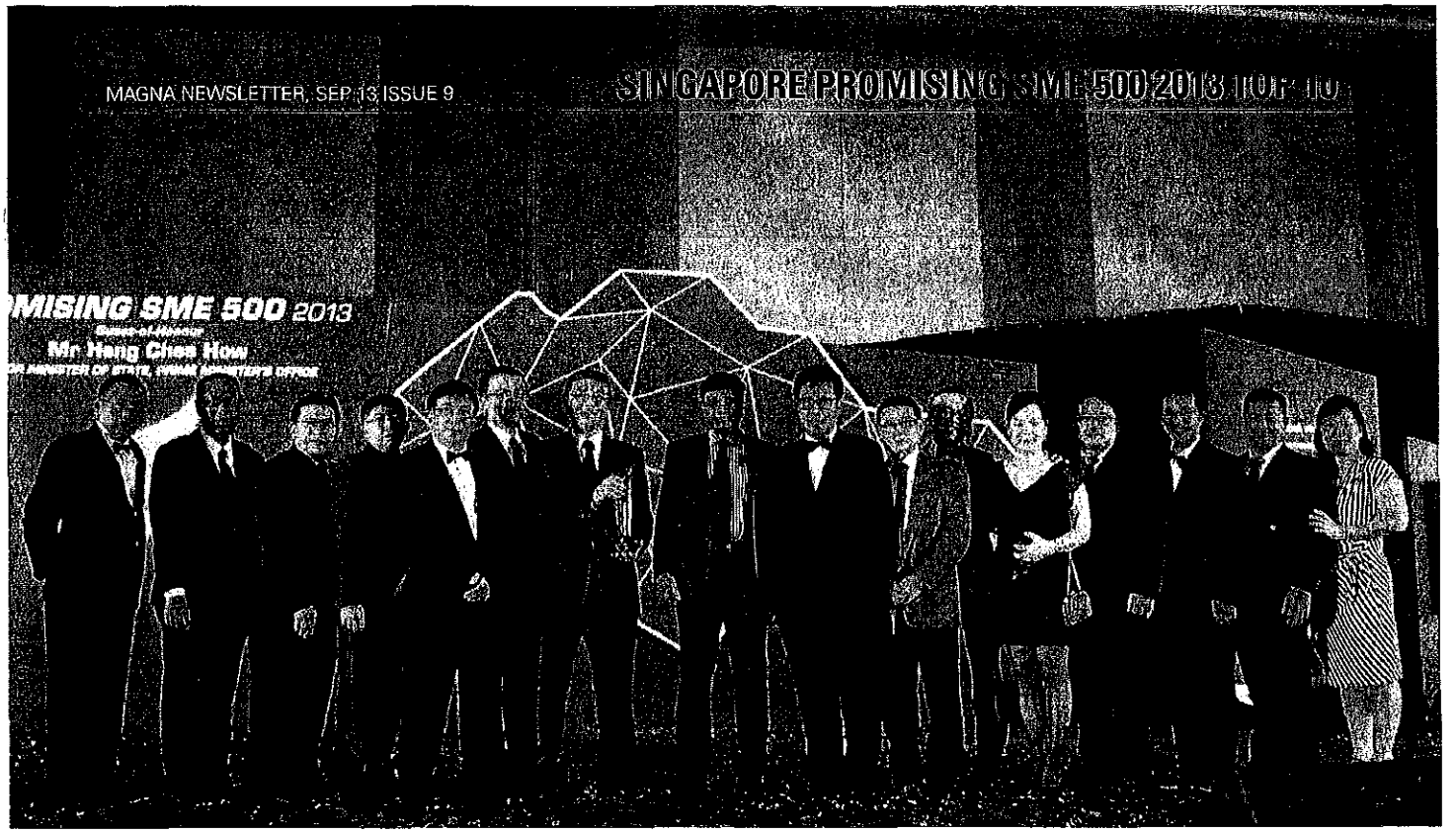
To God be the Glory!



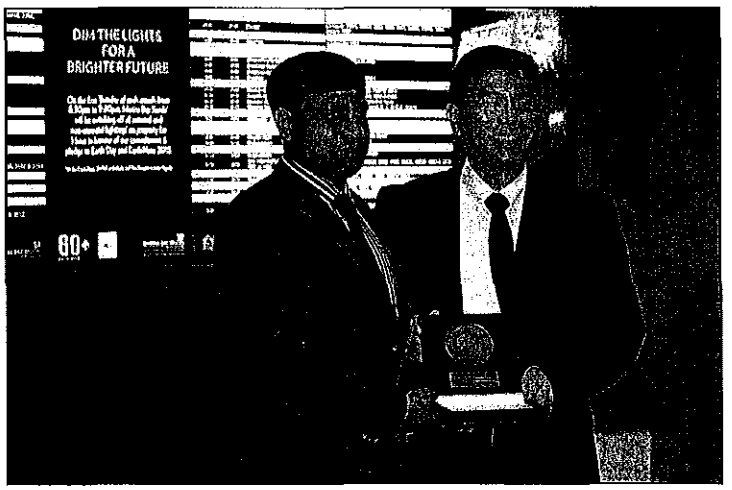
Mr. Ruby Wijaja of PT Magna Indonesia rejoicing with Mr. Nelson Cheng of Magna International ◀



▲ Mr. Michael Lay, Mr. Nelson Cheng, Mr. Ruby Widjaja & Mr. Albert S.Kom



▲ Group photo of the management team of Magna International and Distributors from Indonesia, Bangladesh and Malaysia

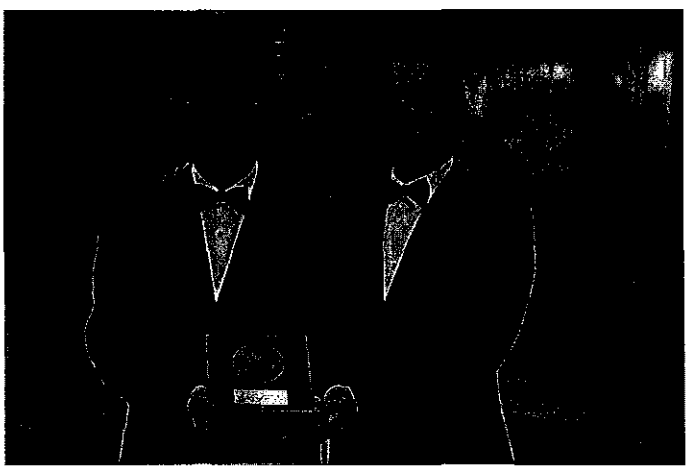


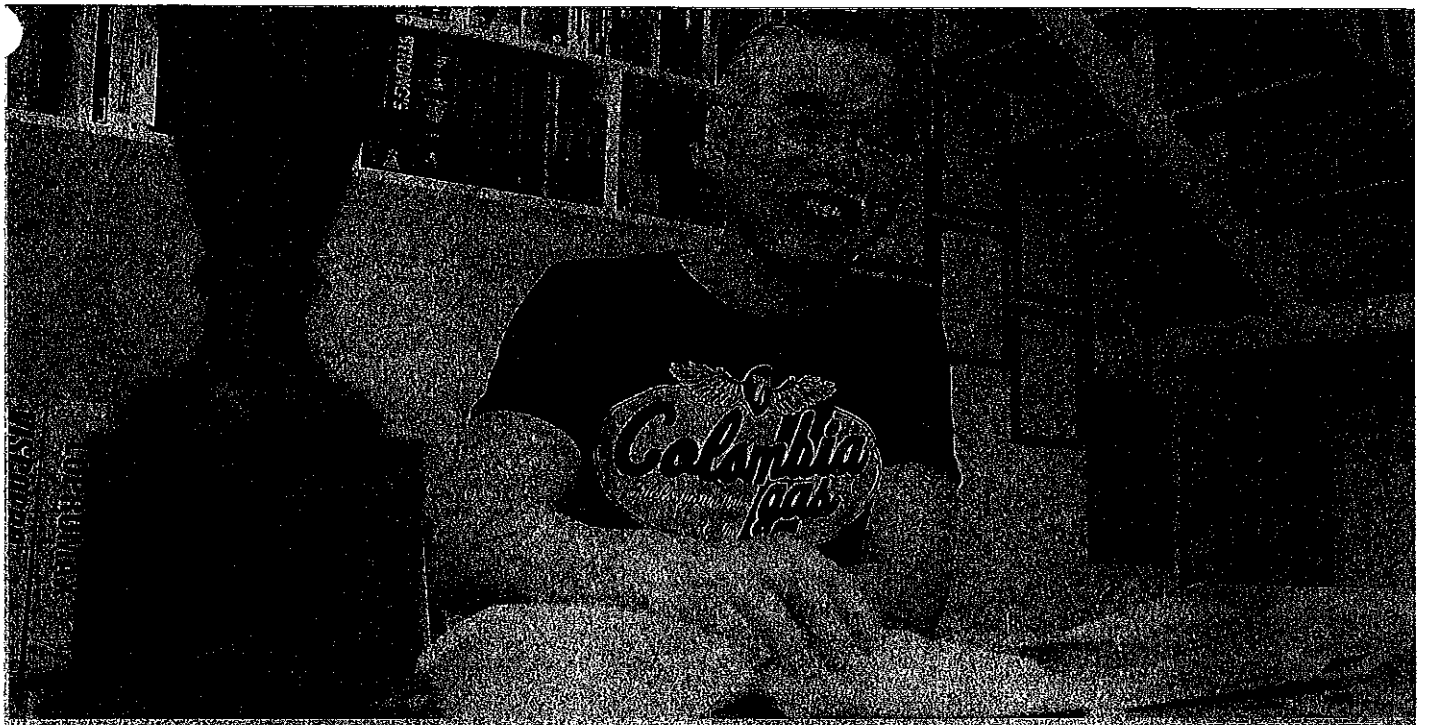
Mr. Haque, Managing Director of Advance Chemicals & Mr. Dickson Cheng; Senior Vice President Magna International with Promising SME 500 Medallion

◀

Mr. Albert Lim Managing Director of Tresol Chemicals Sdn.Bhd and Mr. Nelson Cheng with the Promising SME 500 Medallion.

▶





PHOTOGRAPHS: BENJAMIN SEETOR

S'pore's leading inventor Nelson Cheng reveals how he comes up with ideas

'I go around looking for trouble'

REPORT: JENNIFER DHANARAJ
jenn@sph.com.sg

Meet Singapore's leading inventor.

And when he says eureka! – it is potentially worth a couple of million dollars.

Mr Nelson Cheng, 56, is the president and founder of local chemical company Magna International.

According to the Intellectual Property Office of Singapore (Ipos), while the Agency for Science, Technology and Research (A*Star) – the nation's lead agency for scientific research – has consistently been the local leader in applying for patents, the individual who has obtained the most patents is Mr Cheng.

He has eight patents locally, which, according to him, already have a commercial value of hundreds of millions.

When we meet him in his office on Enterprise Road, the wall of its conference room is adorned with gold and silver certificate plaques of successful patent grants from all over the world.

In all, he has filed 16 patents worldwide. These include ones in Taiwan and the European Union for the same inventions that he has patented here. This is to 'protect his inventions' in overseas markets.

"Every time I am awarded a patent, I still feel immense joy. It never gets old," he says with a twinkle in his eye.

His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

Mr Cheng filed his first patent with Ipos in 2007, and it was a long, drawn-out process.

"For almost two weeks, I was staring at a blank piece of paper in front of my computer," he recalls, being huddled up in a corner of his study for hours at a time.

"Once I typed the title of my invention, I was just stuck. I didn't know what else to write."

Mr Cheng's wife would bring him snacks and sweets in a bid to encourage him – but nothing worked.

And eventually, he wrote a sentence. From then on, with his wife's words of support, he wrote one to two sentences every day till he finished writing the patent.

This process took about six months.

But practice makes perfect, he says.

Now, filling up the paperwork for the patents takes only about 10 days.

Mr Cheng says his inventions are critical to the success of his medium-sized company.

He wasn't interested in inventing when he was a child, he says. Just like his two children, 17 and 24, who have no interest, now, in coming up with patentable ideas.

He started late too – at 50 – and filing patents was a means to propel his company forward.

"Bigger multinational companies often 'bullied' outs as they would share our technologies and then refuse to sign a non-disclosure agreement with us, hence profiting from the ideas," says Mr Cheng tiredly.

Now, his company, founded in 1990, can protect its ideas.

With a hint of triumph in his voice, he says: "We are like David and the bigger companies are Goliath. Basically our patents are like David's stones on a sling-shot."

So how does he come up with his ideas?

Mr Cheng says: "I go around looking for trouble.

"Other people avoid problems, but I like them.

"During sales meetings, bottom line profits are often at the bottom of the agenda, he says.

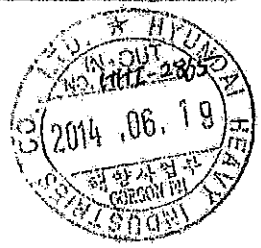
"Indeed, staff and distributors are encouraged to complain about inefficiencies.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

OFFSHORE & ENGINEERING DIVISION

1, CHEONHA-DONG, DONG-KU, ULSAN, KOREA

TEL.: +82-52-202-3868 FAX.: +82-52-250-9582 E-mail: iky5042@hhi.co.kr



18th June 2014

Magna International Pte Ltd
10H Enterprise Road,
Singapore 629834.

Attention; Mr. Nelson Cheng

Dear Mr. Cheng.

Ref: Letter of Appreciation

We want you to know how much we appreciate the way and the speed you developed the solution for the protection of the cable trays and junction boxes for the BCP Carigali Project.

I can't remember a time when our cable trays and junction boxes have looked so nicely groomed and at impeccable condition. Several visitors have commented on how nice things look.

We want you to know that we are very pleased with your Vappro 886 VCI invention and the quality of service you provide. You have truly lived up to our expectations as the **Singapore Leading Inventor.**

We sincerely appreciate your responsiveness and the way you conduct business. We have recommended your company to others because of our satisfaction with your service. We look forward to doing business with you Thank you for your excellent service.

Yours Faithfully

Mr. Kwang Youn Lee

E & I Manager
Gorgon Project Management Department (Q6T0)
Offshore & Engineering Division
Hyundai Heavy Industries Co.Ltd

AEA 2013140006

ASIA EXCELLENCE AWARD 2014

SUPREMACY & OUTMOST INTEGRITY

Proudly awarded to

Mr Nelson Cheng

International Pte Ltd Magna

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FOR ACHIEVING EXCELLENCE INTEGRITY AND EXCEPTIONAL ACCOMPLISHMENTS IN ASIA BUSINESS FIELD

AUTHORIZED SIGNATORY

29 November 2013

DATE

RECOGNIZING BUSINESS EXCELLENCE

PROMISING™ SME 500 2012

PLATINUM CATEGORY

MR NELSON CHENG

MAGNA INTERNATIONAL PTE LTD

MS. LILY CHUNG

DIRECTOR, ENTERPRISE DEVELOPMENT

SMBA and Partners are dedicated to recognizing and establishing excellent business practices amongst local Small and Medium Enterprises, inculcating greater innovation, promoting higher industry service levels and advocating uncompromising business ethics. Together with our Partners and Associates, we strive to build a dynamic, robust and ever forward looking business climate in Singapore.

Service . Integrity . Innovation . Motivation . Creativity

Serial No.: SMBA12061485U

A winning formula

Magna International combines a commitment to business excellence with customised solutions for its clients

CHEMICAL company Magna International is a homegrown set-up that has succeeded in going global.

It first started out in 1990 as a small, single unit office and factory at Tampines Industrial Park making cleaning and maintenance chemicals.

Today, it operates out of a 16,000 sq ft factory at Enterprise Road, owns four factory buildings in Ontario, Canada, and has representative offices in Finland, China, Australia and Indonesia.

Among its main customers are regional armed forces which have used its products to preserve military equipment and weaponry. Companies in the offshore, oil and gas, and pulp and paper mills industries also use its products.

Its international success was recognised by the Small Medium Business Association this year, which awarded it the Promising SME 500 Platinum Award for specialisation in corrosive prevention technology and cleaning surfactants.

Fittingly, the company's vision is to "build a global business through innovations, strategic alliances and quick adaptability to customers' expectations", says Mr Nelson Cheng, Magna's president and chief executive.

He believes his firm's winning formula lies in its "honesty, reliability, value-added technology and commitment to business excellence".

"We are delighted to be selected for this first-time award, which represents a milestone for us in relation to the local chemical industry," he adds.

> We pride ourselves on giving a value-add factor, especially to help our customers save both time and money through our customised solutions. This is illustrated by how we are able to keep equipment and machinery in pristine working condition even after long periods of downtime.
>
> – Mr Nelson Cheng (above right), president and chief executive, Magna International

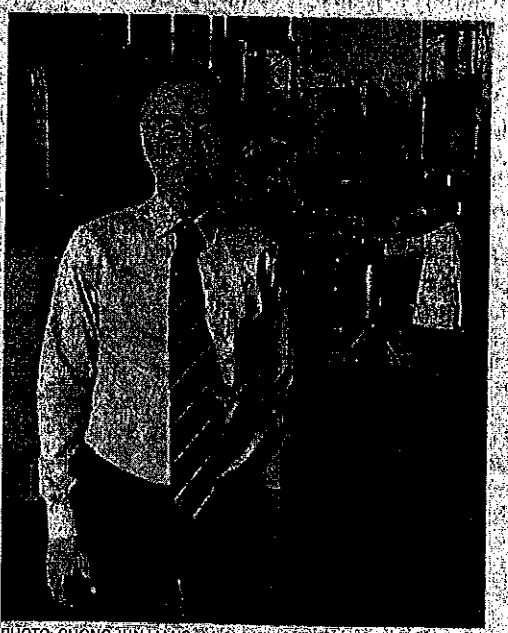

PHOTO: CHONG JUN LIANG

Over the years, the company has focused heavily on research and innovation to create new chemical products and improve existing ones. Its product range has grown considerably. It started out making cleaning and maintenance chemicals but now has a full range of specialty surfactants, lubricants and additives too.

Pushing the boundaries of corrosion prevention technology, it developed a range of anti-corrosion products under the brand Vappro, which use vapour technology to penetrate even the smallest of crevices, giving full protection to machinery, equipment and metallic parts against corrosion.

"We pride ourselves on giving a value-add factor, especially to help our customers save both time and money through our customised solutions. This is illustrated by how we are able to keep equipment and machinery in pristine working condition even after long periods of downtime," says Mr Cheng.

He says the company is now working on a new range of bio-based metalworking fluids, engine oils, greases and gun lubricants.

It is also looking to increase its presence in markets like Russia and Eastern Europe. - Jamie Ee

More R&D patents going to local inventors

Patent numbers up by one-third, applications rise 10%

By HOE PEI SHAN

SINGAPORE is getting more innovative, with local inventors awarded nearly one-third more patents in a year.

The number of applications for patents has also risen, by almost 10 per cent, according to the latest National Survey of Research and Development (R&D) in Singapore.

The findings are "heartening", said chief executive officer Low Teck Seng of the National Research Foundation, a unit in the Prime Minister's Office that sets the national direction for R&D.

"They show our research strategy is yielding results," Professor Low told The Straits Times.

The survey is conducted annually by the Agency for Science, Technology and Research (A*Star).

It shows the number of R&D patents shot up from 653 to 855 in 2011, a 31 per cent increase.

The rise coincides with the record $17.4 billion Singapore had pumped into the R&D sector the same year.

At the same time, applications to the Intellectual Property Office of Singapore (Ipos) climbed from 1,762 to 1,913, a rise of 8.6 per cent.

The sector that owned the most patents as of 2011 was manufacturing, particularly electronics, precision engineering and biomedical.

Public research institutes and institutions of higher learning dominate the field of patents resulting from local R&D.

A*Star, the nation's lead agency for scientific research, has consistently been the local leader in applying for patents.

The Singaporean who has obtained the most patents from Ipos is 56-year-old Nelson Cheng Kit Yew (see box), president and chief executive of Singapore chemical company Magna International.

But success should also be measured by how the research and innovation are turned "into solutions with economic and social impact", said Prof Low.

He noted that the output of biomedical sciences manufacturing has more than tripled, from $6.3 billion in 2000 to $23.3 billion in 2010, and created 14,000 jobs by the end of 2010.

A*Star, for instance, said last December that its technologies could generate more than $500 million in commercial value for companies in the coming years.

One example is its H5N1 bird flu diagnostic kit that allows doctors to rapidly and accurately detect all existing strains of the H5N1 virus in a single test.

The strategic focus on such areas as biomedical sciences, clean water and interactive and digital media has benefited Singapore, said Prof Low.

"These have sharpened our competitive edge and generated new growth."

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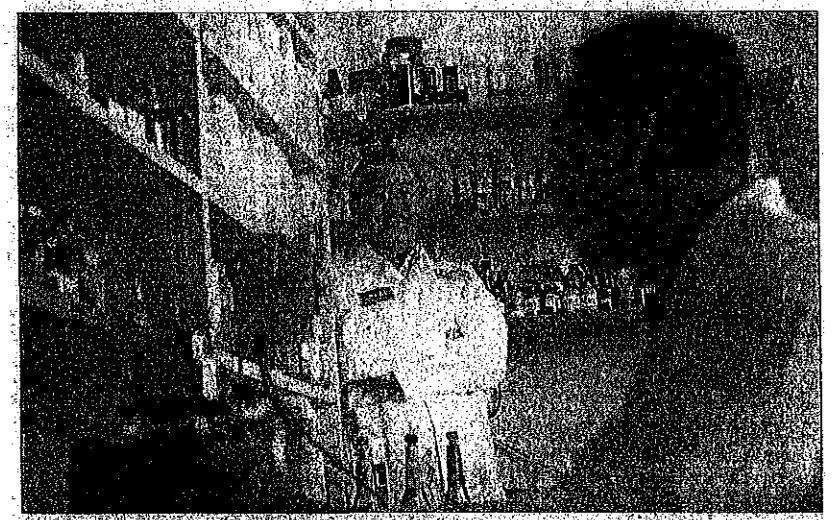

Magna International president and CEO Nelson Cheng, in the company's lab with a chemist at work, is the Singaporean with the highest number of patents from the Intellectual Property Office of Singapore. PHOTO: JOSEPH NAIR FOR THE STRAITS TIMES

8 patents worth 'hundreds of millions of dollars'

SINGAPORE'S leading inventor Nelson Cheng Kit Yew estimates that his eight patents have a commercial value of "hundreds of millions of dollars".

"This is based on industry field feedback and market evaluation," said the president and chief executive of Singapore chemical company Magna International.

Most of his patents are to fight corrosion.

"Corrosion is a US$220 billion (S$274 billion) problem in the United States alone," said the 56-year-old Singaporean, who trained as a marine engineer.

"All metals corrode, hence there is a huge market for anti-corrosion products," he added.

Mr Cheng, who filed his first patent with the Intellectual Property Office of Singapore in 2007, said his innovations range from the composition and manufacture of biodiesel lubricants to corrosion inhibitors and even an "internal gun bore scanner".

The scanner is used to inspect and record the internal bore condition of some battle tanks and gun barrels of a specified diameter range.

It can capture detailed information of any fouling, nicks, corrosion, major blemishes, heat-cracking and erosion or excessive wear of the surface, he added.

Mr Cheng said he plans to get several more patents.

"These would be mainly lubricants for military use and some vapour corrosion inhibitors for oil and gas industries."

HOE PEI SHAN

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Singapore's leading inventor: 'I go around looking for trouble'

S'pore's leading inventor Nelson Cheng reveals how he comes up with ideas. -TNP
Jennifer Dhanaraj

Wed, Mar 20, 2013
The New Paper

SINGAPORE - Meet Singapore's leading inventor.

And when he says "eureka" - it is potentially worth a couple of million dollars.

Mr Nelson Cheng, 56, is the president and founder of local chemical company Magna International.

According to the Intellectual Property Office of Singapore (Ipos), while the Agency for Science, Technology and Research (A*Star) - the nation's lead agency for scientific research - has consistently been the local leader in applying for patents, the individual who has obtained the most patents is Mr Cheng.

He has eight patents locally - which, according to him, already have a commercial value of "hundreds of millions".

When we meet him in his office on Enterprise Road, the wall of its conference room is adorned with gold and silver certificate plaques of successful patent grants from all over the world.

In all, he has filed 16 patents worldwide. These include ones in Taiwan and the European Union for the same inventions that he has patented here. This is to "protect his inventions" in overseas markets.

"Every time I am awarded a patent, I still feel immense joy. It never gets old," he says with a twinkle in his eye.

His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

Mr Cheng filed his first patent with Ipos in 2007 - and it was a long, drawn out process.

"For almost two weeks, I was staring at a blank piece of paper, with a pen in my hand, every night," he says, laughing.

He recalls being huddled up in a corner of his study for hours at a time.

"Once I typed the title of my invention, I was just stuck, I didn't know what else to write."

Mr Cheng's wife would bring him snacks and sweets in a bid to encourage him - but that didn't work.

And eventually, he wrote a sentence. From then on, with his wife's words of support, he wrote one to two sentences every day till he finished writing the patent.

This process took about six months.

But practice makes perfect, he says.

Now, filling up the paperwork for the patents takes only about 10 days.

Mr Cheng says his inventions are crucial to the success of his medium-sized company.

He wasn't interested in inventing when he was a child, he says. Just like his two children, 17 and 24, who have no interest now in coming up with patentable ideas.

He started late too - at 50 - and filing patents was a means to propel his company forward.

"Bigger multinational companies often 'bullied' ours as they would share our technologies and then refuse to sign a non-disclosure agreement with us hence profiting from the ideas," says Mr Cheng ruefully.

Now, his company, founded in 1990, can protect its ideas.

With a hint of triumph in his voice, he says: "We are like David and the bigger companies are Goliath.

Singapore's leading inventor: 'I go around looking for trouble'

By Jennifer Dhanaraj
The New Paper
Wednesday, Mar 20, 2013

SINGAPORE - Meet Singapore's leading inventor.

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S'pore's leading inventor: I go around looking for trouble

March 17, 2013 - 12:51am

By: Jennifer Dhanaraj

TNP PHOTO: Benjamin Seetor

Meet Singapore's leading inventor, Mr Nelson Cheng, 56, the president and founder of local chemical company Magna International. He has got eight patents locally and 16 patents worldwide.

His innovations range from biodiesel lubricants to corrosion inhibitors that can be used in the commercial, industrial and even military sectors.

So how does he come up with his ideas?

Mr Cheng says: "I go around looking for trouble".

Tags: Inventions

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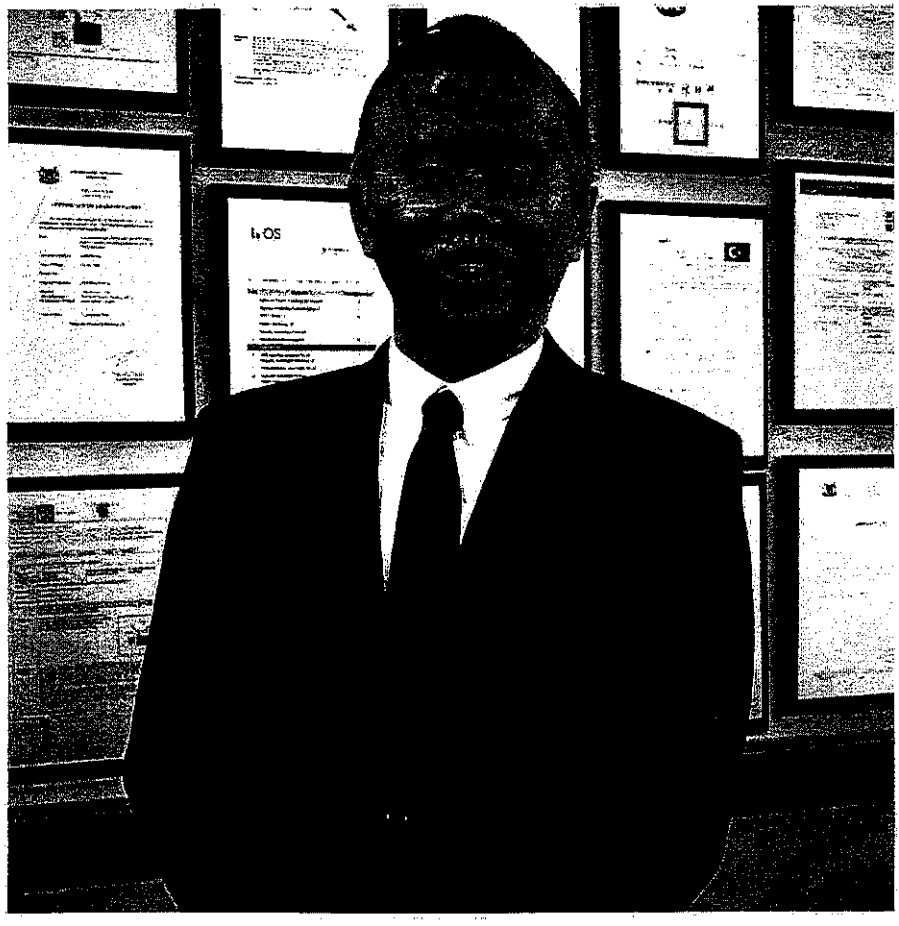


Nelson Chong

YOUR PARTNER IN CORROSION CONTROL & ENVIRONMENTAL PROTECTION

The term "Garden City" is consistently evident in the outdoor environment of Singapore, from blossom lined streets to lush treetop canopies. A far cry from its sleepy fishing village origins, the Singapore we see today prides itself on being a worldwide icon for sustainable eco-cities. As for the way forward, the city-state views environmental sustainability as essential to achieving economic development and maintaining a high quality of life while working towards a greener future.

Aligned with Singapore's vision of environmentally-friendly economic progress, one local company has made it its mission to build a cleaner, greener and better tomorrow. For more than 20 years, Magna International Pte Ltd has provided environmentally friendly, biodegradable chemical solutions to the needs of the industry. Magna's main focus lies in corrosive-preventive technologies, cleaning and specialty surfactants, lubricants and sustainable oil additives with world renowned brands such as Vappro, Viscopro and Lupromax. Its Lupormax brand set a world record in MURI (Indonesia World Records Museum) for running a car and a motorcycle without lubricant for more than eight hours, travelling a distance of more than 280 km; while Vappro recently won the prestigious Singapore Star Packaging Award and the highly coveted WorldStar Packaging Award 2014.

"We live in accordance of taking care of our environment," explains Mr Nelson Chong, President/ CEO of Magna. Mr Chong recognises the value of the company's mission, giving employees a strategic perspective of how Magna's green efforts align with its business model. Magna takes a strong stance on promoting green, biodegradable products that serve their function while ensuring environment responsibility on a global scale. In pursuit of solutions to day to day inherent problems, Mr Cheng is among of Singapore's leading inventors with 13 patents under his belt, with the latest being in Heat Activated Technology Lubricant (HAT), utilizing heat to enhance the extreme pressure and lubricity properties of lubricants.

From a fledgling company in 1990 trying to establish a foothold in the industry, Magna has built its legacy on quality, service and innovation. Responding to the need for environmentally friendly products, Magna began R&D into this area. Two years later, the company expanded to international markets in Canada, Australia, Europe, India, among others. Since then, Magna has forged strategic alliances and corporate partnerships that span across the globe and successfully decentralized its production outside Singapore.

Today, Magna International Pte Ltd has an extensive portfolio of products, services and solutions; and is part of Magna Group that comprises Magna (I.L.) Chemical Pte Ltd; Magna Energy Pte Ltd; Magna Australia Pty Ltd; and Magna Chemical Canada Inc. for the North American market, including the NAFTA Region.

Mr Cheng is set to lead the company towards its goal to be a publicly listed company by 2020. On his plans for the near future, Mr Chong shares, "As for the next step of where our efforts are headed, we want to spread the word on sustainability on a bigger scale. I'm accepting invitations to talks and events and looking into more strategic collaborations."

Magna's success has enabled its active involvement in times of needs and tragedies like the Aceh tsunami, where it provided disinfectants to relief workers in affected regions. "We must learn how to create wealth through innovation; wealth creation is a sustaining source to help the poor," adds Mr Cheng. Magna is indeed setting an example in making a difference in both the society and the environment.

MAGNA NEWSLETTER

RESTRICTED | June 14 | ISSUE NO 10

Championing Innovation: Magna gains new accolade

At the Asia Excellence Awards 2014 gala dinner - Mr. David Ong, Member of Parliament for Jurong GRC (Left) presents the award to Mr. Nelson Cheng, President/CEO, Magna Group.

Magna Group is a proud recipient of the Asia Excellence Award 2014. Held on 22nd May at Marina Bay Sands, Singapore, winning organisations were awarded for their outstanding performance in business and entrepreneurship.

With the aim of showcasing business excellence in leading Small-Medium Enterprises (SMEs), the annually-held Asia Excellence Awards recognise and celebrate SMEs in the Asia region which have made notable achievements in their respective industries.

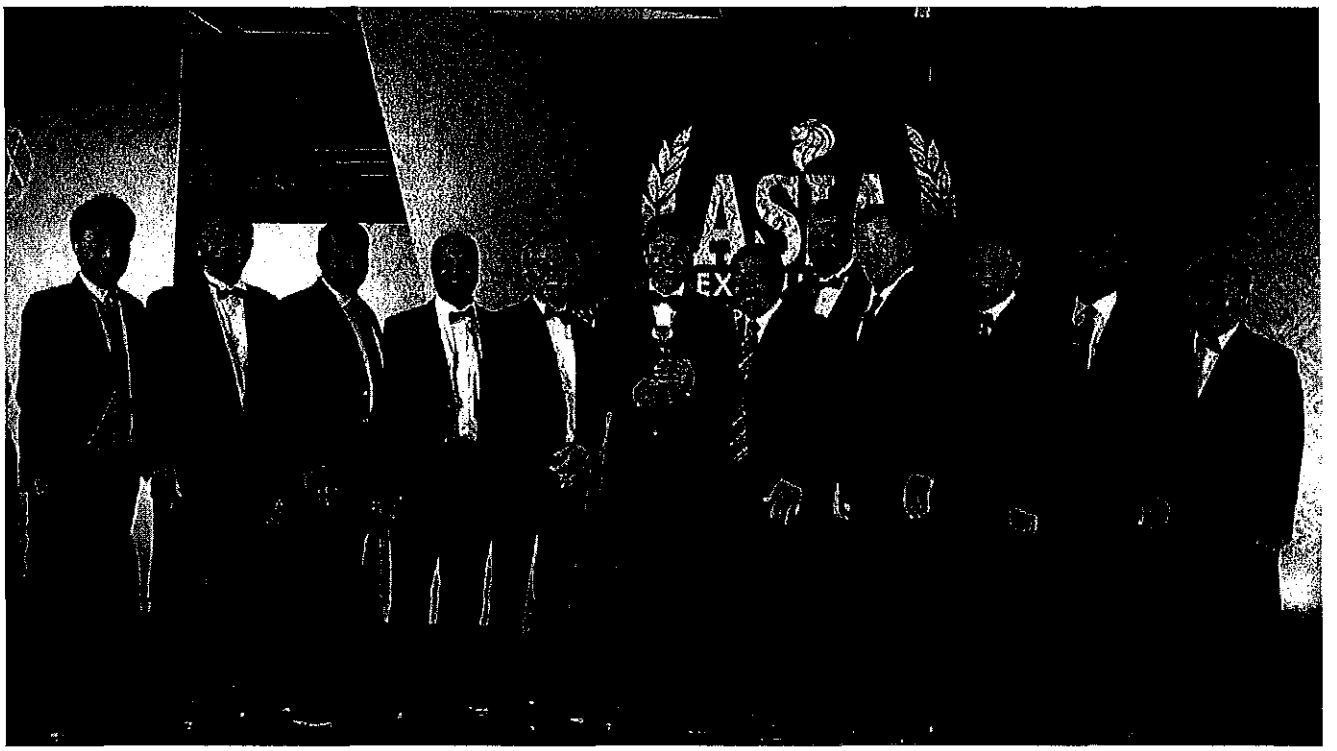
Culminating in a selected total of the top 100 winners, the prestigious business competition evaluated participating organisations based on their industry leadership, best practices, sustainability and growth in the Singapore economy, and innovation in concepts and branding.

President/CEO Mr. Nelson Cheng accepted the award on behalf of Magna Group. Among those present were Guest of Honour Mr. David Ong, Member of Parliament for Jurong GRC, business leaders and entrepreneurs from across Asia.

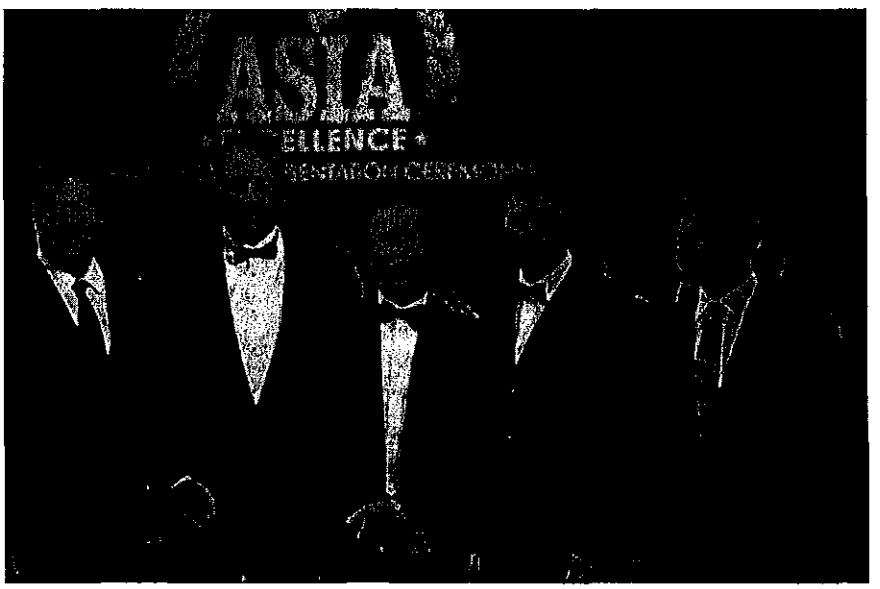
This is the second year running that Magna Group has won the award. Mr. Cheng said that the recognition from the award was the product of team effort.

"Magna is committed to sustaining strategic partnership with our stakeholders from across the globe. We will continue to innovate across our business areas to come up with sustainable solutions."

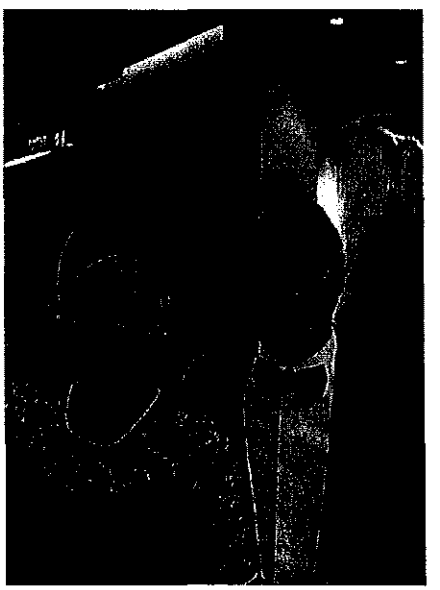
The awards connect businesses in the Asian SME community, providing a platform to encourage excellence in entrepreneurship and to influence future trends in the SME landscape.



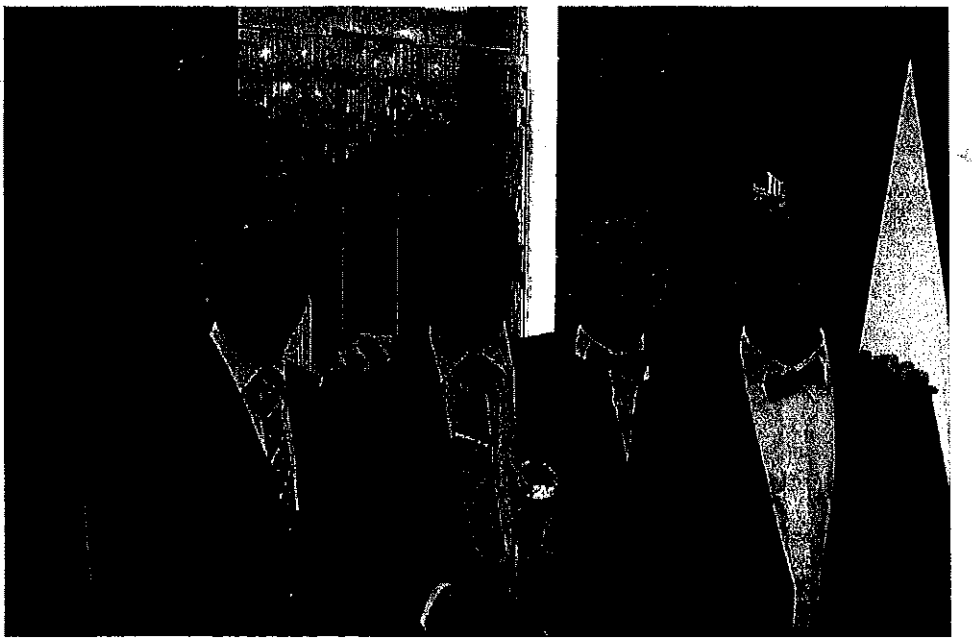
Celebrating together - With international distributors, business partners and associates (From left to right) Mr. Albert Lim, Mr. Dickson Cheng, Mr.Ekramul Hoque, Associate Professor Ashraful. Hoque ,Mr. Nelson Cheng, Mr. John Cook, Mr. James Cheng, Dr. Tomas Prieto, Mr. Terry Hepler, Mr. Michael Lay, Dr. Agus Setiyono and Mr. .Andruey



(From left to right)Mr.Terry Hepler, Dr.Tomas, Nelson Cheng, Mr. John Cook & Dr. Agus, at pre-dinner cocktail

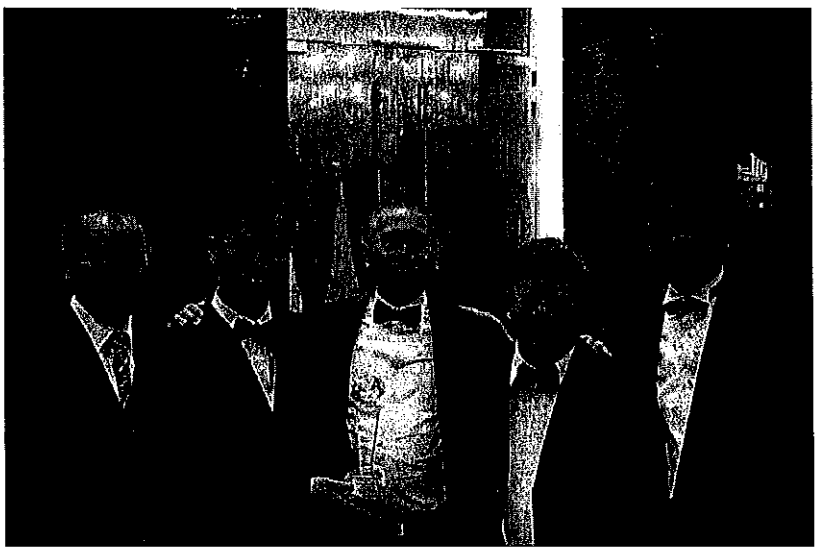


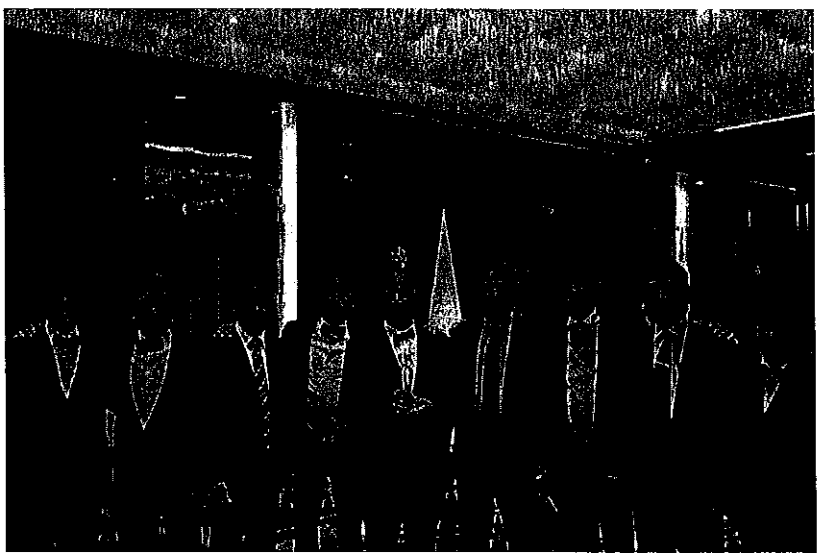
Mr. and Mrs. Nelson Cheng arriving at the awards ceremony



(From left to right) Mr.James Cheng, Dr.Agus Setiyono, Mr.Nelson Cheng & Associate Professor Ashraful Hoque pose for a photo after the awards ceremony.

(From left to right) Mr. James Cheng, Mr.Michael Lay, Mr. Nelson Cheng, Mr. Andruey and Mr. Dickson Cheng pose for a photo after the awards ceremony





With international distributors, business partners and associates after the awards ceremony

AUTOMOTIVE PERFORMANCE ENHANCING PRODUCTS

NEWSLETTER

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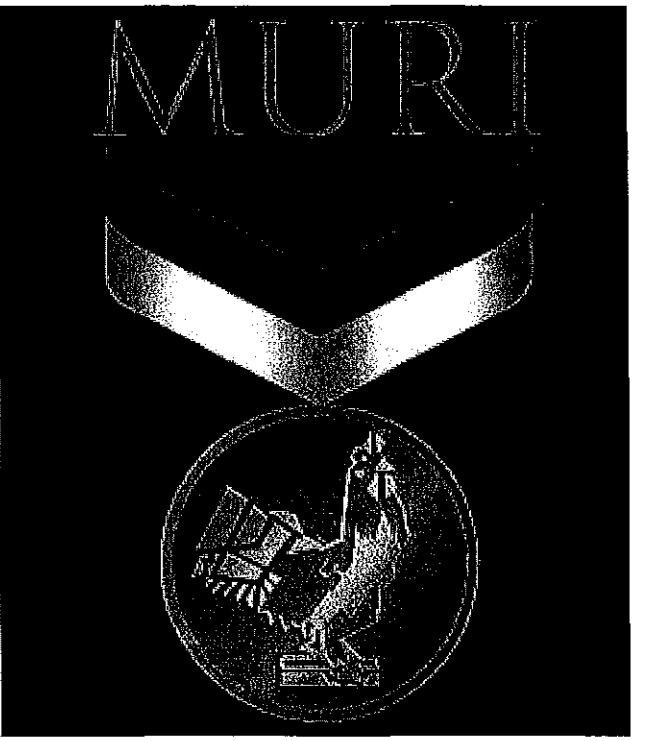
ISSUE 01 APRIL 13

Lupromax Sets World Record in MURI (Indonesia World Records Museum)



The Indonesia World Records Museum or MURI, its Indonesian acronym, is a unique museum founded by Jaya Suprana as a means of inspiring young Indonesians to excellence in their field of endeavor. Unlike the Guiness Book of World Records, the MURI Museum, recognizes only those in Indonesia who have attained World Record achievement in their field of expertise.

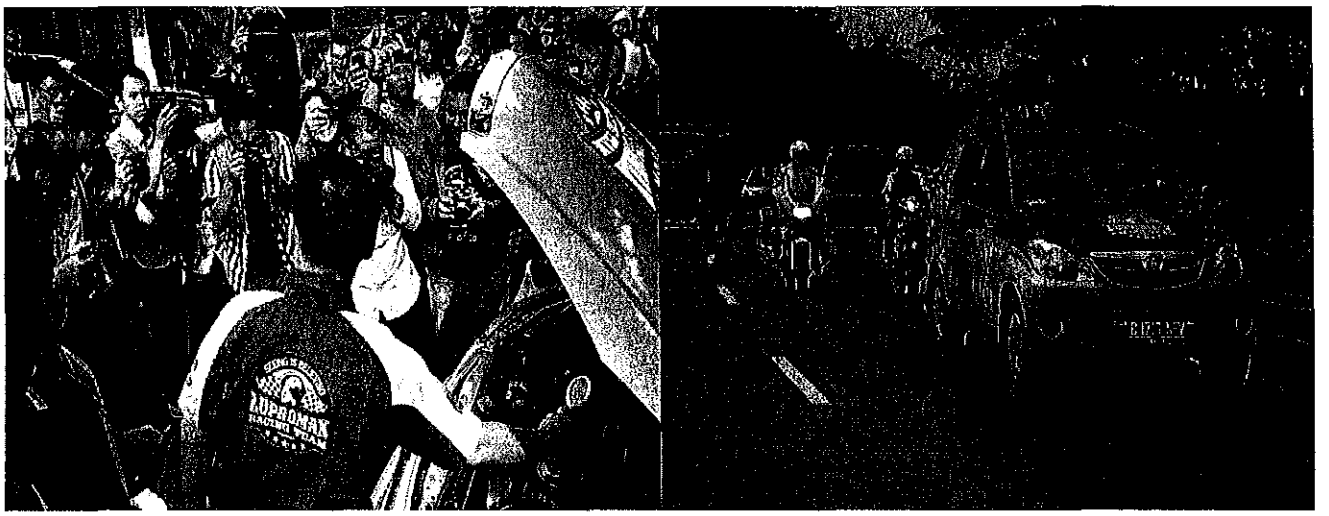
Since its beginning in 1990, the museum has given the MURI Award to the superlative of achievement in Indonesia s biggest, best, rarest and most unusual. In its 23 years of existence, MURI has honored more than 5,000 who have showed the world that the best can be found in Indonesia.

Magna's Lupromax distributor for Indonesia, Ruby Wijaja received the prestigious MURI Award for his test performance of Lupromax- EA oil additive in April 2012. The award was given in the category for Motor Cars and Motorcycles. The award itself is for the "Longest Run Without Lubricant" lasting more than 8 hours. The test was arranged to take place on April 29, 2012 at Tangerang for the purpose of demonstrating to the automotive community that Lupromax has superb lubrication properties and to validate the functionality of "HAT"**(Heat Activated Technology)**. We also wanted to prove publicly, the quality of Lupromax products through setting the MURI world record for "Running cars and motorcycles without oil."The recognition gained through this grueling test of machinery and technological advancements in lubricant research would awaken the public to alternative solutions regarding lubricant enhancement products and prove to the world that Lupromax-EA is the best on the market.

The method of the test was to add Lupromax-EA to the engine oil of an automobile and a motorcycle. After it was thoroughly mixed in each vehicle by running its engine, the oil was then completely drained from the engines. The vehicles were then driven round Bumi Serpong Damai(BSD) Square in Tangerang to see how long they could go until their engines seized from lack of sufficient lubricant.

This grueling test Lupromax-EA lasted 8 hours and 5 minutes for the car, covering 283 km. The motorcycle test lasted 8 hours and 10 minutes covering 242 km. The only reason they stopped was because the drivers were exhausted and it was enough to prove to the world that Lupromax EA fulfilled its performance claims of being the best lubricant additive on the market. This test proved to the Muri Museum that Lupromax is indeed a world class engine lubricant that enabled the auto and motorcycle to set a world record for running without oil. The award was given at their monthly ceremony in Jakarta, Indonesia to PT Magna, Indonesia for Lupromax and its world record setting achievement.

Lupromax-EA and the other items in their product line are destined to become a household name and people s first choice in lubricant enhancing additives.



The car and motorcycle used in setting the World Record for Lupromax EA engine oil additive that resulted in receiving the Prestigious MURI Award for running for more than 8 hours without oil.

Jaya Suprana, left, founder of the MURI Museum, presenting the Award to Ruby Widjaja for running a car and motorcycle for more than 8 hours after protecting the engines with Lupromax-EA engine oil additive lubricant.

Nelson Cheng, Inventor of Lupromax Heat Activated Technology and President of Magna International Pte Ltd, center, Ruby Widjaja front right with the Lupromax Management Team. celeberating at Lupromax s office in Indoensia after the receipt of the Prestigious MURI Award

Magna

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PT. ANUGERAH WIDJAJA MANDIRI CHEMINDO

ONE STOP SOLUTION IN CHEMICAL ENGINEERING SERVICES

9th July 2014

Autonomous University of Baja California
Av. Álvaro Obregón y Julián Carrillo s/n
Edificio de Rectoría
Col. Nueva, C.P. 021100.
Mexico.

Attention: Members of the Selection Committee

I am pleased to offer my support Mr. Nelson Cheng's application for an Honorary Doctorate Degree from the University Autonomous of Baja California (UABC).

I have known Mr. Cheng for more than 15 years and have been his Master Distributor for the Magna Chemicals and recently Lupromax Heat Activated Lubricants in Indonesia. I am amazed by many of his inventions and industrial solutions he has provided to solve countless industrial problems we encountered over the last 15 years.

His ability to develop products that are environmentally friendly and yet highly effective in solving industrial problems are noteworthy. His recent invention using Heat Activated Technology (H.A.T.) for lubricants is a phenomenal success in Indonesia.

As compared to other products available in the market, the said technology is free from all heavy metals as it uses sulfurized vegetable ester as an EP (extreme pressure) agent.

As founder and CEO of Magna Group of Companies headquartered in Singapore, Mr. Nelson Cheng has built Magna into a global company, with distributors in more than 30 countries and manufacturing plants in Singapore, Malaysia, Canada, Korea and Indonesia.

His company's mission and slogans "Building a Greener & Better Tomorrow", Solving Corrosion Problems with the Environment in Mind", and "Innovation Fuelled Success" have been echoed by all his distributors Worldwide.

Mr. Cheng has been recognised several times for his innovations by the national newspapers (The Straits Times, New Paper) and Intellectual Property of Singapore (IPOS). Throughout his career, Mr. Nelson Cheng has always find time to give back to society, he has supported the World Children Fund, orphanage in Cambodia for several years. **His life time endeavours of feeding the poor, clothing the naked and housing the orphaned has directed many businessmen including myself with a sense of purpose of wealth creation.**

In summary, I can think of no one more deserving of an Honorary Doctorate from UABC. Mr. Nelson Cheng is among the very successful chosen in the chemical field and one that has been recognized by many organizations throughout Singapore and regionally for his innovations and green technology.

If you require any additional information, please do not hesitate to contact me.

Yours Faithfully

PT. ANUGERAH WIDJAJA MANDIRI CHEMINDO
General Contractor, Speciality Water Treatmand Chemical, Engineering Service
Industrial Cleaning, Chemical & High Performance Lubrication Technology

Ruby Widjaja
Chairman/CEO

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10th July 2014

Autonomous University of Baja California
Av. Álvaro Obregón y Julián Carrillo s/n
Edificio de Rectoría
Col. Nueva, C.P. 021100.
Mexico

Selection Committee

Dear Sirs,

It is my distinct pleasure to recommend for your approval, Mr. Nelson Cheng's application for an Honorary Doctorate Degree from the University Autonomous Baja California.

Over his long and distinguished career in the chemical industry, Mr. Nelson Cheng has solved many industrial problems through his green solution products and inventions. One of the products that is worthy to be mentioned is the Vappro 886, a VOC (volatile organic compound) free water based VCI coating. The said product is currently an approved product for used on all our cable trays and junction boxes against corrosion globally.

Four more of Mr. Nelson's products namely Vappro 811, Vappro 812, Vappro 812G and Vappro 837C are now in the process of approval for use soon.

Feedback from our customers for Mr. Nelson's invented product has been positive and encouraging.

Over the course of his distinguished career, Mr. Cheng has unstintingly given himself in service to his company and his community. It would be superfluous to list the honours he has received, but it is worth mentioning that Mr. Nelson Cheng is also the recipient of the 2014 Promising 500 SMEs' Top Entrepreneur Award.

Mr. Cheng has come to exemplify the best characteristics of visionary leader, in whom success and service are inseparable.

In awarding Mr. Nelson Cheng an Honorary Doctorate from University of Autonomous Baja California, the pleasure may be his, but the honour is surely ours.

Yours Faithfully

Mr.Kwang Youn Lee
Hyundai Heavy Industries Co., Ltd.
E & I Manager GORGON Project
Management Department (Q6To)
Offshore & Engineering Division

Bageneff
advancing life with technologies

2nd July 2014
Autonomous University of Baja California
Av. Álvaro Obregón y Julián Carrillo s/n
Edificio de Rectoría
Col. Nueva, C.P. 021100.
Mexico

To Selection Committee:

I am pleased to support Mr. Nelson Cheng's application for an Honorary Doctorate at the Autonomous University of Baja California. As Mr. Cheng's business associate and friend, I can attest to his entrepreneurship, support for education and exemplary contributions to the industry and his community.

Consisting of Magna International Pte Ltd, Magna (FE) Chemical Pte Ltd, Magna Chemical Canada Inc. and Magna Energy Pte Ltd, Magna Group is represented across Europe, North America and Asia-Pacific. Magna Group has made notable achievements in innovation for its products, with LUPROMAX ® engine additive recently earning a place in the Indonesia World Records Museum (MURI) for the longest distance travelled by car and motorcycle without lubricant. Magna Group is expanding into other business areas such as Nano Lubrication Technology and Energy under the guidance of Mr. Cheng.

Mr. Cheng is the first individual in Singapore with ownership of the most number of patented inventions, as stated in the media. He demonstrates a very high level of foresight for solutions that contribute to industry development and its related processes. This illustrates his high level of motivation and passion for innovation, a trait that has been recognised not only in his industry, but across fields such as education and R&D.

Besides industry-wide work, Mr. Cheng also contributes his service to academia and the community. Magna International Pte Ltd has been a long-time partner with educational institutions, offering funding and collaboration for research projects, internships and visits. As the Guest of Honour at the recent Singapore Ministry of Education's Innovation Forum in June 2014, Mr. Cheng shared with teachers, students and academics on harnessing the potential of innovation and creativity.

In summary, Mr. Cheng demonstrates excellence in both professional and personal aspects. He is among the most talented and passionate individuals that I have the pleasure of knowing and working with, giving back to the community while leading Magna Group. With the mentioned attributes, I believe that he is well-deserving of this outstanding distinction. I give my full support on his application for the Honorary Doctorate my highest recommendation.
Thank you.

Sincerely,

Dr. THAVASI Velmurugan, Ph.D
Director
velmu@bageneff.ca Ph: +1-647-866-4113

16 July 2014
Autonomous University of Baja California
Av. Álvaro Obregón y Julián Carrillo s/n
Edificio de Rectoría
Col. Nueva, C.P. 021100.
Mexico.

Attention: Selection Committee

Dear Sir,

I am pleased to offer my support for the nomination of Mr. Nelson Cheng for the Honorary Doctorate Degree from University Autonomous of Baja California. Magna International, the company which Mr Cheng has founded, has been an industrial partner with Singapore Polytechnic for about 15 years.

Magna International was awarded the Industrial Training Programme Participation Award on the 10th Year of their partnership with Singapore Polytechnic as an acknowledgement of Magna's educational spirit, reflected in its participation in Polytechnic's Industrial Programme. Mr. Cheng of Magna is forever very supportive for education. Besides providing the students of Polytechnic a platform for Industrial Training, Magna also provides financial support in terms of scholarship to our students, and this is indeed a very encouraging and generous move.

My collaboration with Magna International grows stronger these few years through Final-Year Projects (FYPs) for our full-time Diploma in Materials Science students as well as part-time Advanced Diploma in Polymer Technology students. Some of our past collaborative FYPs include "Optimisation and Characterisation of Commercial Volatile Corrosion Inhibitor (VCI)", "Water-based VCI", "Vapour Biodegradable Corrosion Inhibitor", "Evaluate the Properties of Migration Corrosion Inhibitor for Steel Reinforcing Bar (Rebar) in Concrete" and "To Formulate and Study the Properties of Reverse Osmosis Membrane Cleaning Chemicals". We had also submitted two papers on VCI to be published in the upcoming PRIS (The Plastics and Rubber Institute of Singapore) Journal.

From my understanding, Mr. Cheng is the award winner **2013 Top 10 Outstanding Achievement Award (Innovation Award)** Singapore Promising SME 500. He is also the winner of **2013 Top Business Luminary Award** under the Singapore Promising SME 500. In additional, Mr. Cheng won the **2013 Top 100 Singapore Excellence Award.** The Singapore Excellence Award is a prestigious business accolade which recognises the entrepreneurial elite in Singapore.

In light of the above, I hope you will agree that an Honorary Doctorate for Mr. Nelson Cheng would be well-deserved distinction. I look forward to your confirmation of same and the opportunity to bring this Honour to Mr. Nelson Cheng.

Yours Sincerely,

Mr. Ho Thiam Aik
Senior Lecturer
Diploma in Applied Chemistry with Materials Science
School of Chemical & Life Sciences
Singapore Polytechnic
(email) thiamaik@sp.edu.sg
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T 713-745-2544 F 713-563-5747
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8th July 2014

Autonomous University of Baja California
Av. Álvaro Obregón y Julián Carrillo s/n
Edificio de Rectoría
Col. Nueva, C.P. 021100.
Mexico

Selection Committee/Board Members:

This letter expresses my honor and pleasure to write in support of Mr. Nelson Cheng's application for a Honorary Doctorate from the Autonomous University of Baja California.

I know Mr. Cheng as an industry leader, inventor, innovator and entrepreneur. As President and CEO of the Magna Group, Mr. Cheng has shown excellence in his field both within his native country of Singapore as well as on an international scale.

Mr. Cheng has been recognized in the media as Singapore's leading inventor. To date, he is currently the holder of 20 patents that attest to the emphasis he places on innovation and creativity within Magna Group and in his industry. One example is seen in Legionella-X, which has a proven 100% bactericidal efficacy against the potentially lethal *Legionella pneumophila* bacterium commonly found in places such as water coolers and air-conditioning condensers. Legionella-X is also effective against the H5N1 virus, placing it among the most effective hospital-grade disinfectants available today.

Helmed by Mr. Cheng, Magna Group has excelled in the chemical and manufacturing industry. With distributors across 25 countries, Magna places strong emphasis on R&D and innovation of environmentally-sustainable products that offer quality solutions. Magna Group is a recent recipient of the **Promising SME 500 (Top 10 Outstanding Achievement Award – Innovation), Top 100 Singapore Excellence Award and Asia Excellence Award.**

Aside from achievements in his career, Mr. Cheng has also made consistent contributions to the community. To support efforts in higher education, Mr. Cheng has established ongoing industrial partnerships spanning more than a decade between Magna Group and institutions such as Singapore Polytechnic, providing a platform for students to learn about the industry and business in a hands-on context. He also serves as an elder in his church.

In view of Mr. Nelson Cheng's impressive credentials, outstanding contributions to the industry, keen support for academia and generosity to the community, I hope that you would agree with my recommendation and whole-hearted support for his application for the well-deserved Honorary Doctorate.

Sincerely,

Ashraful Hoque, M.D., Ph.D.
Associate Professor
The University of Texas M.D. Anderson Cancer Center

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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International Bureau

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200719154-7 31 December 2007 (31.12.2007) SG

(71) Applicant and
(72) Inventor: CHENG KIT YEW [SG/SG]; Block 5#14-101 Normanton Park, Singapore 119002 (SG).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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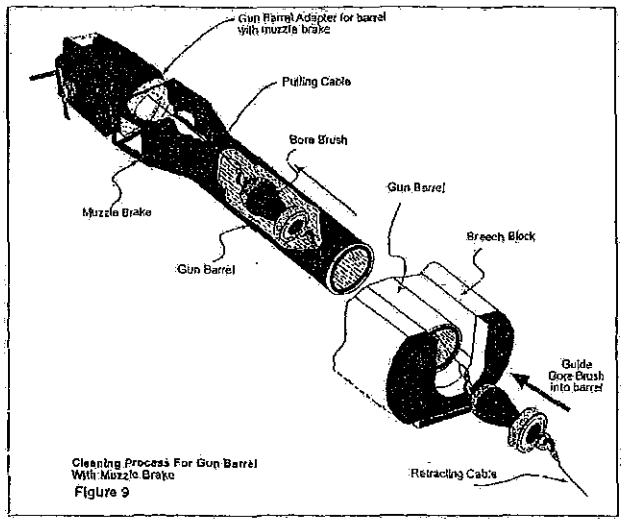
Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

Published:
— *with international search report*

(54) Title: A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON, RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.



(57) Abstract: The invention relates to a method and apparatus for cleaning gun barrels with or without muzzle brake of firearm, artillery and battle tank, whereby cleaning fluid, bore brush and a winch is used to remove carbon, grease, oil, rust and combustion ammunition residue from the barrel.

WO 2009/085013 A1

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 154349 has been granted in respect of an invention having the following particulars:

Title	:	COMPOSITION AND PROCESS OF MANUFACTURING OF BIODIESEL GREASE BY GELLING BIODIESEL, ANTI-WEAR ADDITIVES, EXTREME PRESSURE ADDITIVES, WATER REPELLENT ADDITIVES AND ANTI-OXIDANT ADDITIVES.
Application Number	:	200800305-5
Date of Filing	:	11 January 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	15 June 2010

Dated this 15th day of June 2010.

Chiam Lu Lin (Ms)
Deputy Registrar of Patents
Singapore

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 158774 has been granted in respect of an invention having the following particulars:

Title	:	A CLEANING METHOD AND PROCEDURES FOR CLEANING CONTINOUS DIGESTER OF PULP & PAPER
Application Number	;	200805577-4
Date of Filing	:	23 July 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	31 December 2010

Dated this 31st day of December 2010.

Liew Woon Yin (Ms)
Registrar of Patents
Singapore

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 153707 has been granted in respect of an invention having the following particulars:

Title	:	A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON,RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.
Application Number	:	200719154-7
Date of Filing	:	31 December 2007
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL # 03-01 GRANDHILL SINGAPORE 118860
Date of Grant	:	14 January 2011

Dated this 14th day of January 2011.

Danielle Yeow Pin Lin (Ms)
Deputy Registrar of Patents
Singapore

（WO/2009/088360）組成とゲル化バイオディーゼルでは、耐摩耗性添加剤、極圧添加剤、撥水添加抗酸化添加バイオディーゼルをグリースを製造するプロセス

Biblio。 | データ | 説明 | クレーム | 国内段階 | お知らせ | ドキュメント

国際事務局にファイルの最新の書誌データ

パブ。番号：WO/2009/088360　　国際出願番号：PCT/SG2008/000121
出版日：　2009年7月16日　　国際出願日：　2008年4月14日
第2章需要がファイルされる：2008年12月19日を

IPCの：　*C10L 1 / 18（2006.01）、C10Mの32分の105（2006.01）、）C11C 3 / 02に*（2006.01

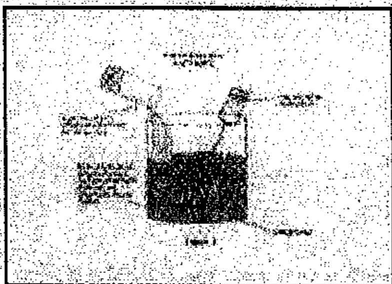
申請：　チェンは、キットユーはSGは[/] SG;（SGの）。

発明者：　チェン、キットユー、（SG）は。

優先度のデータ：　200800305から5　2008年1月11日　S9で

タイトル：　組成とゲル化バイオディーゼルでは、耐摩耗性添加剤、極圧添加剤、撥水添加抗酸化添加バイオディーゼルをグリースを製造するプロセス

要約：　本発明は、組成とゲル化バイオディーゼル燃料でバイオディーゼル油の製造プロセスに関連する、耐摩耗性添加剤、極圧添加剤、撥水剤、抗酸化剤添加。



指定状態：　AEは、銀、アル、のAOは、AT、AUの、アルファベット順、学士号、は、BHをBGにより、BRのは、BW、ベリーズ、カナダはCH、CN等のCOは、CR、CUは、チェコ共和国、ド、わからない、BBを済みDMは、アルジェリア、ECは、EEのは、例えば、ESの、FIの、GBのGDのは、GE、GHのは、GM、GTは、HNの、人事、胡、IDが、イリノイ州では、JPはKEを、体重、KMのことだが、KNには、京都、KRの、カザフスタン、ロサンゼルス、液晶、Linuxカーネル、LRの、LSは、LTは、LUが、LYの、マサチューセッツ州、、、、、00:03、ミネソタ、MWのは、MXのMG、マイ、モザンビーク、NAは、当社のNG、MEをメリーランドNOの場合、ニュージーランド、OMの、PGの、ペーハーは、PL、PTは、ROは、RSのRUのは、SCは、SD、SEのは、SG、SKテレコムは、SL、SMの、SVは、シリア、のTJ、TMの、テネシー州、TRを、TTのは、TZ、UAは、ugの、米国、ウズベキスタン、ベンチャーキャピタル、ベトナム、座、ザンビア、ZW集団。
アフリカ地域知的財産公社。（アリポ）（BWの、GHのは、GMは、LSは、MWの、、、ザンビアを、ZW集団赫旭モザンビーク、NAのは、SD、SLのは、SZ、TZをKe）を
ユーラシア特許機構（EAPO）（アルファベット順、BYのメダル、体重、カザフスタン、MDのRUの、のTJ、TM）の
欧州特許庁（EPO）は（はAT、、、、、CYはCHをBGのないこと、czに、ド、わからない、EEのは、ES、FIの、のFR、GBの、入庫、人事、胡、IEのは、ITは、LTは、LUは、左心室です、三菱商事は、MT、ナショナルリーグ、なしは、PL、PTは、ROは、SEのは、SI、SKテレコムは、TR）
アフリカ知的財産機関（追加証）（ブルキナファソのBJ、CFの、CGを、CIのは、CM、ジョージアはGN、赤道ギニア、GWは、MLのは、MR、NEのは、SN、TDを、TGを）。

出版言語：　英語（EN）

言語をファイリング：　英語（EN）

(WO/2009/088360) de samenstelling en het proces van productie van biodiesel in vet door geleermiddelen biodiesel, anti-slijtage TOEVOEGINGSMIDDELEN, extreme druk TOEVOEGINGSMIDDELEN, waterafstotend en anti-TOEVOEGINGSMIDDELEN OXIDANT TOEVOEGINGSMIDDELEN

Biblio. | Gegevens | Beschrijving | Claims | Nationale fase | Mededelingen | Documenten

Laatste bibliografische gegevens van het dossier bij het Internationaal Bureau

Pub. Aantal: WO/2009/088360 **Internationale aanvraag Aantal:** PCT/SG2008/000121
Publicatiedatum: 16.07.2009 **Datum van Internationale Indiening:** 14.04.2008
Hoofdstuk 2 Demand Geplaatst: 19.12.2008

IPC: ***C10L 1 / 18*** (2006.01), ***C10M 105/32*** (2006.01), ***C11C 3 / 02*** (2006.01)

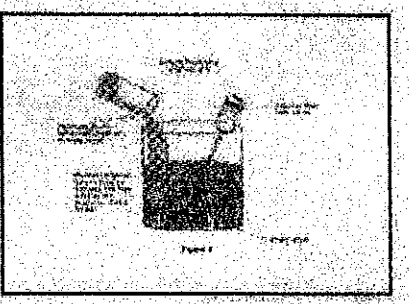
Aanvrager: **Cheng, Yew [Kit SG / SG]; (SG).**

Uitvinder: **Cheng, Kit Yew; (SG).**

Prioriteit Data: 200800305-5 11.01.2008 SG

Titel: Samenstelling en werkwijze de productie van biodiesel vet door geleermiddelen biodiesel, anti-slijtage TOEVOEGINGSMIDDELEN, extreme druk TOEVOEGINGSMIDDELEN, waterafstotend en anti-TOEVOEGINGSMIDDELEN OXIDANT TOEVOEGINGSMIDDELEN

Abstract: De uitvinding heeft betrekking op de samenstelling en het proces van productie van biodiesel in vet door geleermiddelen biodiesel, anti-slijtage additieven, extreme druk additieven, waterafstotende additieven en anti-oxidant additieven.



Aangewezen Staten: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, door, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, magnetron, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, de VS, UZ, VC, VN, ZA, ZM, ZW.
Afrikaanse regionale Intellectual Property Org. (ARIPO) (BW, GH, GM, KE, LS, magnetron, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW)
Eurasian Patent Organization (EAPO) (AM, AZ, door, KG, KZ, MD, RU, TJ, TM)
Europees Octrooibureau (EOB) (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV , MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR)
Afrikaanse Intellectual Property Organization (OAPI) (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Publicatie Taal: Engels (EN)

Klassement Taal: Engels (EN)

（WO/2009/085013）的清洗方法和設備去除油，油脂，碳，防銹，廢渣燃燒彈藥桶火砲火砲，主戰坦克和槍支。

最新書目數據文件與國際局

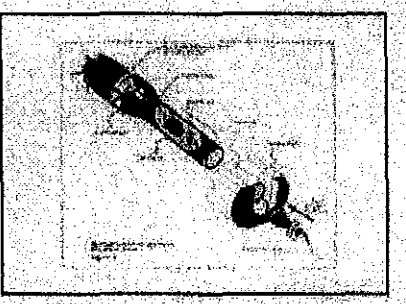
酒吧。 編號：WO/2009/085013
出版日期： 09.07.2009
第2章需求歸檔：2008年12月2日
國際申請號：PCT/SG2008/000016
國際申請日：2008年1月15日
國際專利分類： *F41A 29/00（2006.01），F41A 29/02（2006.01）*

申請人： 鄭浩紫杉[法國興業/法國興業]（新加坡）。
發明人： 鄭浩日本橫河（新加坡）。

優先級數據： 200719154-7 2007年12月31日 法興

標題： 一個清洗方法和設備去除油，油脂，碳，防銹，廢渣燃燒彈藥桶火砲槍，主戰坦克和槍支。

摘要： 本發明涉及一種方法和設備的清潔槍管與慣用制動或沒有槍支，火砲和作戰坦克，即清洗液，孔刷和絞車是用來去除碳，油脂，油，銹和燃燒彈藥殘留物桶。



指定的國家： 整發射，股份公司，鉛，上午，政務，在，非盟，排序，學士學位，BB心跳，血糖，波黑，商業登記，體重，山，BZ，加州，甲烷，裝CN，一氧化碳，鉻，銅，鋯，教育署署長，不知道，糖尿病，溶解氧，DZ型，歐共體，東歐，乙二醇，胚胎幹，流動注射，國標，廣東，通用電氣，生長激素，基因改造，總噸的HN，人力資源，胡，身份證，白細胞介素，中，是太平紳士，九龍東，幼稚園，知識管理，千牛，京都議定書，雷克南，科招，洛杉磯，信用證，力勁，英國LR，最小二乘，低溫，陸，立法院，碩士，博士，我，鎂，旺角，錳，兆瓦的MX，我的，錳鋅，鈉，臭，鎳，一氧化氮，新西蘭，有機質，前列腺素，PH值，特等，鉑，反滲透，遙感，茄，資深大律師，支持SD，硒，法國興業，水庫，SL和動向，空速，黃亞的TJ，商標，總氮，章，測控，雅軒，尿酸，地下，美國，烏斯，風險投資，鈥氪，雜，貿，ZW型，
org的非洲地區知識產權，（ARIPO的）（體重，生長激素，基因改造，柯，最小二乘，兆瓦，錳鋅，鈉，支持SD，SL和深圳，雅軒，地下，貿，ZW型）
歐亞專利組織（EAPO）（上午，排序，山，幼稚園，科招博士茄，勻，商標）
歐洲專利局（EPO）的（在，成為，保證，甲烷，賽揚，兩航，教育署署長，不知道，電子工程，胚胎幹，流動注射，阻燃，國標，遺傳資源，人力資源，胡，IE瀏覽器，是信息技術，低溫，盧，司儀，美國業大拿，自然語言，一氧化氮，特等，鉑，反滲透，東南，矽，水庫，章）
非洲知識產權組織（OAPI）（高爐，北京，CF卡，重心，傳播，醫案，遺傳算法，肺炎，Gq的，毛重，毫升，燒共振，東北，錫，運輸署，甘油三酯）。

出版語言： 英語（中文）
備案語言： 英語（中文）。

（WO/2009/085013）的清洗方法和設備去除油，油脂，碳，防銹，廢渣燃燒彈藥桶火砲火砲，主戰坦克和槍支。

文獻記錄。 | 數據 | 描述 | 索賠 | 國家階段 | 公告 | 文件

最新書目數據文件與國際局

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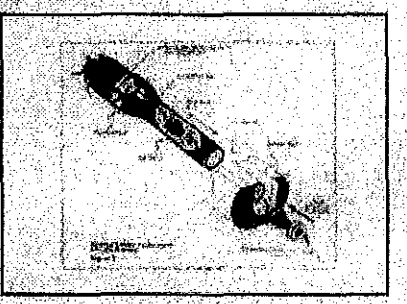
國際申請號：PCT/SG2008/000016
國際申請日：2008年1月15日
國際專利分類。 *F41A 29/00（2006.01），F41A 29/02（2006.01）*

申請人： 鄭潔紫杉 [法國興業/法國興業]（新加坡）。
發明人。 鄭洁日本橫河（新加坡）。

優先級數據： 200719154-7 2007年12月31日 法興

標題： 一個清洗方法和設備去除油，油脂，碳，防銹，廢渣燃燒彈藥桶火砲槍，主戰坦克和槍支。

摘要： 本發明涉及一種方法和設備的清潔槍管與槍口制動或沒有槍支，火砲和作戰坦克，即清洗液，孔刷和絞車是用來去除碳，油脂，油，銹和燃燒彈藥殘留物桶。



指定的國家： 整發射，股份公司，鋁，上午，政務，在，非盟，排序，學士學位，BB心跳，血糖，波黑，商業登記，體重，山，BZ，加州，甲烷，架CN，一氧化碳，鉻，銅，鎘，教育署署長，不知道，糖尿病，溶解氧，DZ型，歐共體，東歐，乙二醇，胚胎幹，流動注射，國標，廣東，通用電氣，生長激素，基因改造，總噸的HN，人力資源，胡，身份證，白細胞介素，中，是太平紳士，九龍東，幼稚園，知識管理，千牛，京都議定書，雷克南，科招，洛杉磯，信用證，力勁，英國LR，最小二乘，低溫，陸，立法院，碩士，博士，我，錢，旺角，錳，兆瓦的MX，我的，錳鋅，鈉，昊，線，一氧化氮，新西蘭，有機氮，前列腺素，PH值，特等，鉑，反滲透，遙感，茹，資深大律師，支持SD，硒，法國興業，水庫，SL和動向，空速，蕾亞的TJ，商標，總氮，章，測控，雅軒，尿酸，地下，英國，烏斯，風險投資，銑氮，雜，貿，ZW型。
org的非洲地區知識產權，（ARIPO的）（體重，生長激素，基因改造，柯，最小二乘，兆瓦，錳鋅，鈉，支持SD，SL和深圳，雅軒，地下，貿，ZW型）
歐亞專利組織（EAPO）（上午，排序，山，幼稚園，科招博士茹，勾，商標）
歐洲專利局（EPO）的（在，成為，保函，甲烷，賽揚，商統，教育署署長，不知道，電子工程，胚胎幹，流動注射，阻燃，國標，遺傳資源，人力資源，胡，IE瀏覽器，是信息技術，低溫，廣，呂，司儀，美國業大象，自然語言，一氧化氮，特等，鉑，反滲透，東南，矽，水庫，草）
非洲知識產權組織（OAPI）（高爐，北京，CF卡，重心，傳播，醫藥，遺傳算法，腎炎，Gq的，毛重，毫升，磁共振，東北，錫，遠輸署，甘油三酯）。

出版語言： 英語（中文）
備案語言： 英語（中文）

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 157245 has been granted in respect of an invention having the following particulars:

Title	:	AN INTERNAL GUN BORE SURFACE SCANNER FOR INSPECTING AND RECORDING THE BORE CONDITION OF THE HOWITZER, MAIN BATTLE TANKS AND GUN BARREL WITH DIAMETER FROM 76 MM TO 240MM.
Application Number	:	200803946-3
Date of Filing	:	23 May 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	14 January 2011

Dated this 14th day of January 2011.

Danielle Yeow Pin Lin (Ms)
Deputy Registrar of Patents
Singapore

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 238 402 A1

(12)

(43) Date of publication:
13.10.2010 Bulletin 2010/41

(51) Int. Cl.:
F41A 29/00 (2006.01) F41A 29/02 (2006.01)

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(86) International application number:
PCT/SG2008/000016

(22) Date of filing: 15.01.2008

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WO 2009/085013 (09.07.2009 Gazette 2009/28)

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Designated Extension States:
AL BA MK RS

(30) Priority: 31.12.2007 SG 200719154

(71) Applicant: Cheng Kit Yew
Singapore 118860 (SG)

(72) Inventor:
- Cheng Kit Yew
Singapore 118860 (SG)

(74) Representative: Valkeiskangas, Taplo Lassi Paavali
Kolster Oy Ab Iso Roobertinkatu 23 P.O. Box 148
00121 Helsinki
00121 Helsinki (FI)

(54) A CLEANING METHOD AND APPARATUS FOR REMOVING OIL, GREASE, CARBON, RUST AND COMBUSTION AMMUNITION RESIDUE FROM BARRELS OF ARTILLERY GUN, BATTLE TANK AND FIREARM.

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 159413 has been granted in respect of an invention having the following particulars:

Title	:	AN IMPERCEPTIBLE CONCEPT/METHODOLOGY OF THE CONVERSION OF BIODIESEL INTO A RANGE OF CLEANING, EMULSIFYING AND DEGREASING AGENTS BY BLENDING A SYNERGISTIC BLEND OF CHEMICALS WITH BIODIESEL.
Application Number	:	200806295-2
Date of Filing	:	22 August 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	15 August 2012

Dated this 15th day of August 2012.

Tan Yih San
Registrar of Patents
Singapore

THE REGISTRY OF PATENTS
SINGAPORE

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the P-No. 156546 has been granted in respect of an invention having the following particulars:

Title	:	COMPOSITION AND METHOD OF MANUFACTURE OF HEAT ACTIVATED CHEMICAL BIODIESEL BASED OIL ADDITIVE.
Application Number	:	200803165-0
Date of Filing	:	24 April 2008
Priority Data	:	-
Name of Inventor(s)	:	CHENG KIT YEW
Name(s) and Address(es) of Proprietor(s) of Patent	:	CHENG KIT YEW 39 PASIR PANJANG HILL #03-01 SINGAPORE 118860
Date of Grant	:	31 October 2011

Dated this 31st day of October 2011.

Tan Yih San
Registrar of Patents
Singapore

IPOS
INTELLECTUAL PROPERTY
OFFICE OF SINGAPORE

In reply please quote our reference

Your reference:	Magna Legionella-X
Our reference:	2015/512154458P
Date:	20 January 2015
Writer's direct number:	63302750

Due 20th May 2015

CHENG KIT YEW
C/O CHENG KIT YEW
78 CHWEE CHIAN ROAD

SINGAPORE 117652

(By Post)

Dear Sir/Madam,

PATENT APPLICATION NO.: **2012028106**

Title of Invention: **FORMULATION AND CHEMICAL COMPOSITION OF A HIGH EFFICACY DISINFECTANT AGAINST AVIAN INFLUENZA H5N1 VIRUS.**

Applicant's name: **CHENG KIT YEW**

INVITATION TO RESPOND TO WRITTEN OPINION

We forward with this letter a copy of the Search Report and Written Opinion drawn up by the Examiner in connection with your request for a Search and Examination Report.

You are invited to respond to the opinion by submitting:

(a) Written submissions or arguments disagreeing with the Examiner's opinion and/or
(b) An amendment of the specification of the application.

If you intend to respond, the response must be filed within **5 months** from the date of this letter. You are also advised to inform us early if you do not intend to respond.

The Examiner will proceed to establish the Examination Report if no response is received by the end of the prescribed period.

Separately, you may be interested to know that the Intellectual Property Office of Singapore (IPOS)has established the ASEAN Patent Examination Co-operation (ASPEC) programme, a patent work sharing programmes with the ASEAN IP offices of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, the Philippines, Thailand and Viet Nam. You may be eligible to benefit from ASPEC if you have filed a corresponding application and received the search and examination report from any other participating ASEAN IP Office.

To find out more about the procedures for requesting ASPEC at IPOS, please refer to our website at www.ipos.gov.sg [About IP > What is Intellectual Property and what are the different types? > What is a patent? > Applying for a patent].

1. (WO2015012761) CHEMICAL COMPOSITION OF A LOW-MAMMALIAN TOXICITY INSECTICIDE

Pub. No.: WO/2015/012761 **International Application No.:** PCT/SG2013/000306
Publication Date: 29.01.2015 **International Filing Date:** 23.07.2013
IPC: ***A01N 25/00*** (2006.01), ***A01N 31/00*** (2006.01), ***A01N 33/02*** (2006.01), ***A01N 41/04*** (2006.01), ***A01N 65/22*** (2009.01)

Applicants: **CHENG, Kit Yew** [SG/SG]; (SG)
Inventors: **CHENG, Kit Yew**; (SG).
CHENG, Yong Ter, Frederick; (SG)

Priority Data:

Title **(EN)** CHEMICAL COMPOSITION OF A LOW-MAMMALIAN TOXICITY INSECTICIDE
(FR) COMPOSITION CHIMIQUE D'UN INSECTICIDE À FAIBLE TOXICITÉ POUR LES MAMMIFÈRES

Abstract:
(EN) The invention relates to the chemical composition of a low mammalian-toxicity insecticide that kills insects through a combination induced stuporous effect and desiccation of its body fluids.
(FR)L'invention concerne une composition chimique d'un insecticide à faible toxicité pour les mammifères, qui tue les insectes grâce à la combinaison d'un effet de stupeur induit et de la dessiccation des liquides corporels des insectes.

Designated States: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
African Regional Intellectual Property Org. (ARIPO) (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW)
Eurasian Patent Organization (EAPO) (AM, AZ, BY, KG, KZ, RU, TJ, TM)
European Patent Office (EPO) (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR)
African Intellectual Property Organization (OAPI) (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Publication Language: English (EN)
Filing Language: English (EN)

A HUMAN NECESSITIES
01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING
N PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF; BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES OR AS HERBICIDES; PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS
25 Biocides, pest repellants or attractants, or plant growth regulators, characterised by their forms, or by their non-active ingredients or by their methods of application; Substances for reducing the noxious effect of the active ingredients to organisms other than pests

A HUMAN NECESSITIES
01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING
N PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF; BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES OR AS HERBICIDES; PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS
31 Biocides, pest repellants or attractants, or plant growth regulators containing organic oxygen or sulfur compounds

A HUMAN NECESSITIES
01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING