#### PART I

## General Overview of Items (A) – (F)

# **COUNTRY: SINGAPORE**

#### A. HOW TO COMMERCIALISE INVENTIONS

# 1. Technology Transfer and Research Collaboration in R&D and Academic Institutions

In Singapore, technology transfer and collaboration with industry play a central role in the two main universities as well as the five polytechnics. Besides these institutes of higher learning, the Agency for Science, Technology and Research (A\*STAR) looks after twelve research institutes.

The National University of Singapore (NUS) has an enrolment of 32,000, including 9000 postgraduate students. It has eight schools/faculties, an academic staff of 2080 and another 1130 research staff. In 2003, the NUS produced some 6150 graduates and 2660 postgraduates in the fields of engineering, science, medicine, business administration, architecture and building and estate management, law, arts and social sciences, and dentistry.

The Nanyang Technological University (NTU) has a full-time student population exceeding 22,800, including 7100 postgraduates. It has 1400 academic and 580 research staff members. In 2003, some 5400 graduated in the fields of engineering, applied science, accountancy, mass communications, and education. Of these, about 1260 obtained higher degrees.

The two universities are major producers of research output and they have been involved in a succession of initiatives aimed at capitalising opportunities latent in their research laboratories. This is to disseminate new and useful knowledge resulting from research and ensure that technology transfer obligations of the university towards a research sponsor are met.

The NUS and the NTU have taken steps to enhance infrastructure and mechanisms to facilitate university-industry interaction with technology transfer being central to the research process. The NUS and the NTU have dedicated technology transfer offices known as the Industry and Technology Relations Office (INTRO) and the Innovation and Technology Transfer Office (ITTO) respectively.

Formed in August 1992, INTRO deals with the entire range of research collaboration, IP management and technology transfer activities. It has established mechanisms via an IP management plan to assist staff members through the invention disclosure process, IP protection, collaboration with industry and licensing. A separate unit called NUS Venture Support is responsible for nurturing start-ups.

Since 1992, INTRO has facilitated the filing of more than 700 patents, of which 166 have been granted. 84 license agreements have been successfully concluded generating an estimated revenue of \$1.44 million<sup>#</sup> and equity in lieu of royalties of some \$4.85 million. In 2002, 136 research collaboration agreements were signed, with a total project value of \$42.5 million or 15.3% of the NUS annual research budget. INTRO has established over 800 partnerships through research collaboration, project agreements and a Memorandum of Understanding (MOU). Two thirds of new and ongoing projects are in the disciplines of medicine, science, engineering and computing.

Formed on March 18, 2000, ITTO aims to promote innovation and transfer of the NTU's intellectual capital for industry's use through licensing and new venture creation. ITTO ensures the protection of IP through a process for disclosure, evaluation and assessment of inventions and patent applications. ITTO supports the schools and various research centers in technopreneurship development and training by providing resources to aid the research on and teaching of entrepreneurial-related subjects.

In 2001/2002, the NTU had a total of 103 collaborative projects with industry, 161 projects with other government bodies, and another 253 projects with other universities and research organizations were in progress, with private funding totaling \$44 million. 31 patents were filed and three spin-off companies were formed. The main thrust of the NTU's research strategy is to concentrate on multi-disciplinary research, in order to optimize the pooling of resources, and to foster synergy and cross fertilization of research.

From 2001 to 2003, both the NUS and the NTU received 451 invention disclosures. 444 patents were filed and 102 granted. The combined research funding for science and engineering was \$352 million. Research undertaken in collaboration with industry, government bodies, local and foreign organizations represents a significant percentage of the universities' overall research effort. Such collaborations are strongly encouraged as they represent a major avenue for technology transfer and rejuvenation of research and improvement to the curriculum. Furthermore, the two universities receive support for research projects under the Academic Research Fund provided by the Ministry of Education. These more academically-oriented projects allow the universities to develop and refine their long-term research capability and strengthen their core competence, especially in the areas of strategic interest to the industry and the nation.

The five polytechnics in Singapore are Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Republic Polytechnic (RP), Singapore Polytechnic (SP) and Temasek Polytechnic (TP). All the polytechnics have their respective technology transfer/innovation offices. These offices encourage entrepreneurship, and help in the protection and commercialization of IP generated by students and lecturers who collaborate on joint projects with companies.

SP's Technology Transfer Centre was set-up in 1990, and they have had many successful joint projects with companies. One successful case is that of a lecturer who patented a formula to make purple gold malleable enough to be fashioned into rings and

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<sup>&</sup>lt;sup>#</sup> All figures quoted are in Singapore dollars, unless stated otherwise.

pendants. An agreement was reached with a well-known local jeweller, Aspial, to market the product globally (<a href="http://www.sp.edu.sg/department/dis/-ttc.htm">http://www.sp.edu.sg/department/dis/-ttc.htm</a>). NP's Innovation and Enterprise Office, (<a href="http://www.np.edu.sg/ie/AboutIEOffice.html">http://www.np.edu.sg/ie/AboutIEOffice.html</a>) provides services that include IP protection and assistance in the process of commercialization. TP has collaborated with a number of government agencies and private enterprises on several R&D projects in the areas of life sciences, engineering and design (<a href="http://www.tp.edu.sg/newsevents/press/aug3105\_RandD.htm">http://www.tp.edu.sg/newsevents/press/aug3105\_RandD.htm</a>). RP's Centre for Innovation and Enterprise promotes entrepreneurship through partnership with industry (<a href="http://www.rp.edu.sg/schoolscentres/cie.asp">http://www.rp.edu.sg/schoolscentres/cie.asp</a>). The NYP's Centre for Business Innovation provides innovative knowledge services and business solutions to industry partners and clients. To date, over 100 industry projects, involving a range of business solutions, to over 80 industry partners and clients from various industries have been completed (<a href="http://www.nyp.edu.sg/SBM/sbm\_cbi.html">http://www.nyp.edu.sg/SBM/sbm\_cbi.html</a>).

Besides the above institutes of higher learning, The Agency for Science, Technology and Research (A\*STAR) supports, funds and manages 12 research institutes; five in biomedical and seven in science and engineering areas. Its research institutes cover fields as diverse as high performance computing, microelectronics, data storage, information technology, and biomedical sciences. They are keen to partner industry players in research and development.

A\*STAR oversees The Growing Enterprises with Technology Upgrade (GET-Up) program, a pro-active integrated approach aimed at boosting the global competitiveness of local technology-intensive enterprises. SMEs which aspire to grow with technology upgrading are known as the "Growing Enterprises" or "GEs" in short. The program aims to harness the existing support schemes of EDB, SPRING Singapore, IE Singapore and the technical capabilities of A\*STAR research institutes to help these companies upgrade and globalize. Between the year 2003 and March 2005, the GET-Up team has visited 536 companies. Of these, 47% were from the engineering sector, 29% from the infocomm sector, 14% from the electronics sector and 10% from the chemical sector.

The program consists of three different assistance schemes. The Operation and Technology Road-mapping (OTR) assistance scheme is to help the SMEs develop a Technology Roadmap which is aligned with the company's mid-term goals and strategy. This will involve both the OTR and technology experts from A\*STAR's research institutes and the company's senior management. Since March 2005, 49 OTRs for 44 companies have been completed.

The Technology for Enterprise Capability Upgrading (T-Up) is another assistance scheme that is a multi-agency effort by A\*STAR, EDB, SPRING Singapore, IE Singapore and IDA which will second Research Scientists and Engineers (RSEs) to local enterprises to enable them to access the pool of R&D talent in the Research Institutes. The research institutes will endeavor to match suitable RSEs with a company based on the R&D project in mind. Partial funding (co-share up to 70% of the researchers' salary) will be provided to the company for the salary of the RSEs up to a maximum of two years. After this period there is an option for companies to retain the seconded staff on a full-time basis if there is mutual agreement. The T-Up program

aims to build up the technological manpower capability of small enterprises in Singapore. Since March 2005, 71 RSEs have been seconded to 56 companies.

Finally, there is the Technical Advisor (TA) assistance scheme. The TA provides indepth technical advice to companies and serves as a bridge to the research institutes. A senior staff member of the research institutes will be appointed as the TA and will spend half a day each month in the company for free. Additional consulting time is chargeable. Since March 2005, 25 TAs have been appointed to 23 companies.

Besides the GET-Up program and the three assistance schemes, A\*STAR also has a commercial arm called Exploit Technologies Pte Ltd (ETPL), which works with researchers from its research institutes to generate, identify, protect and exploit IP created for the benefit of Singapore. In recent years it has acquired and developed specialists in the fields of IP management, technology intelligence and competitive intelligence, commercialization, incubation and spin-off management. For example, it is well appreciated that biotechnology is an industry with a high level of risk and a long lead-time to market. A 'gap' between the publicly-funded, upstream academic research activities and the downstream commercial activities has been identified. Venture capitalists are not likely to fund very early stage incubation of companies, and the IP is usually not developed sufficiently to generate revenue from licensing-out to interested third-party entities. This 'gap' was plugged by ETPL via the Commercialisation of Technology (COT) grant to fund such early-stage, developmental and validation research originating from A\*STAR's research institutes. Such research is of great benefit as its commercial value is increased significantly, thereby attracting potential licensees.

Sources: Singapore Country Study: Feasibility of Establishing IP related Business Development Hubs in ASEAN; Singapore Biotech Guide 2004/2005;

http://www.a-star.edu.sg/astar/index.do; http://www.sp.edu.sg; http://www.np.edu.sg; http://www.np.edu.sg; http://www.rp.edu.sg

#### B. HOW TO PROFIT FROM ORIGINAL INDUSTRIAL DESIGNS

# 1. Protection for Industrial Designs in Singapore

The Registered Designs Act (Cap. 266) came into force on November 13, 2005. The Act, together with subsidiary legislation consisting of the Registered Designs Rules 2000, forms the legislation governing the registered designs law in Singapore.

Prior to November 13, 2000, protection for designs in Singapore was automatically granted upon registration in the United Kingdom. With the enactment of the Registered Designs Act in Singapore, all designs that were registered in the UK prior to November 13, 2000 will continue to enjoy protection in Singapore. The Registered Designs Act is accessible at <a href="http://statutes.agc.gov.sg">http://statutes.agc.gov.sg</a>.

Protection for a registered design lasts for an initial period of five years from the date of application. The registration may however be renewed every five years up to a maximum of 15 years, subject to the payment of renewal fees. To file for design

protection, an applicant can choose to file online via eDesigns (<a href="http://www.ipos.gov.sg">http://www.ipos.gov.sg</a>) or submit a paper application to the Registry at the Intellectual Property of Singapore (IPOS). The estimated processing time for a design is two to three months. Only a formal examination is conducted by the Registry.

Like many countries, Singapore allows priority claims in design applications. If there is a corresponding application filed earlier in a Paris Convention country or World Trade Organisation member country, it is possible for an applicant to claim priority from the first filing provided the registration in Singapore is made within six months from the date of the first filing.

A design refers to the shape, configuration, pattern or ornament applied to an article by an industrial process. To qualify for registration, it must, in general, be new and has to be applied to an article by an industrial process, i.e. more than 50 copies of the article have been or are intended to be produced for sale or hire.

On April 17, 2005, Singapore acceded to the Geneva Act of the Hague Agreement.

#### 2. Government

The Ministry of Information, Communication and the Arts (MICA) is the overall lead agency for developing the design industry in Singapore. In August 2003, the DesignSingapore Council was formed to spearhead a national initiative to develop and promote design in Singapore. The Council implements programs to grow the design-driven industries (architectural services, advertising services and visual communications design, interior design, fashion design, product and industrial design and so on) and to actively profile and promote Singaporean design overseas. To foster a more pervasive design culture in Singapore, the Council seeds new design awareness programs through schools, public institutions and activities (http://www.designsingapore.org).

#### 3. Education

Design is taught as part of the "Design and Technology" course – a compulsory subject at lower secondary (age 13-14) and optional for the upper secondary (age 15-16) levels. The polytechnics and specialised art schools (NAFA - Nanyang School of Fine Arts and Lasalle-SIA College of the Arts) offer diplomas in various design disciplines.

Design modules are also offered in engineering courses in Nanyang Technological University (NTU) and the National University of Singapore (NUS), including a masters' in design technology at the Design Technology Institute (with the Eindhoven Institute of Technology) in the NUS Faculty of Engineering. The NUS also offers degrees in architecture and industrial design from its School of Design and Environment.

# 4. Competitions and Awards

Design competitions of varying types are available in Singapore. A good example of a local competition is a product design competition held by Samsung Asia Pte Ltd. Applicants are required to design covers and accessories for Samsung's MP3 players.

The Singapore Design Award (SDA) is a prestigious international award given to outstanding examples of innovations from all over the world. Launched by IE Singapore in 1988, the biennial SDA has been organized by the Designers Association Singapore (DAS) since 2000. SDA is open to all Singaporean and foreign-based designs and the award competition categories cover product design, graphic design, interactive design and packaging design.

# 5. Design Projects

There are many design projects supported or sponsored by the DesignSingapore Initiative. One such project is the Singapore Design Festival 2005. (http://www.designsingapore.org/Default.asp?Page=184)

Sources: <a href="http://www.mica.gov.sg">http://www.mica.gov.sg</a>; <a href="http://www.designsingapore.org">http://www.designsingapore.org</a>;

http://www.ipos.gov.sg

# C. CONTRIBUTION OF TRADEMARKS TO BUSINESS DEVELOPMENT

# 1. Trademark protection in Singapore

The legislation governing trademark law in Singapore is made up of the Trade Marks Act 1999 (Cap. 332), together with its subsidiary legislation which consists of the Trade Marks Rules and Trade Marks (International Registration) Rules (The Trade Marks Act is available at http://statutes.agc.gov.sg).

In Singapore, the registration of a trademark is valid for 10 years from the date of application. Protection can last indefinitely subject to the payment of renewal fees, and with proper use of the mark. To file for trademark protection, an applicant can choose to file online via eTradeMarks (<a href="http://www.ipos.gov.sg">http://www.ipos.gov.sg</a>) or submit a paper application to the Registry of Trade Marks at the Intellectual Property of Singapore (IPOS). Upon submission, the application would go through formal examination, search, examination and publication before proceeding to registration. The estimated processing time for a trademark is four to six months.

Like many countries, Singapore allows priority claims in trademark applications. If there is a corresponding application filed earlier in a Paris Convention country or World Trade Organization member country, it is possible for an applicant to claim priority from the first filing provided the registration in Singapore is made within six months from the date of the first filing.

With effect from July 1, 2004, well known marks were given greater scope of protection. For instance, the owner of a well known trademark may take action against the use of a trademark if the use of a trademark would take unfair advantage of the distinctive character of the well-known trademark.

Singapore is a contracting country to the Madrid Protocol.

# 2. Use of Trademarks in Branding and Franchising

Many SMEs in Singapore have established successful and thriving businesses based on their branding initiatives. These successful companies are predominantly from the Food and Beverage (F&B) industries. Some examples of such successful brands are Ya Kun (one of the case studies), BreadTalk, Barang Barang and Expressions.

There are many private companies that offer branding services in Singapore. International Enterprise Singapore (IE Singapore), a statutory board under the auspices of the Ministry of Trade and Industry (MTI), has a directory of the contact details of about 50 brand specialists on their website.

Recognizing the strategic importance of branding for business expansion, IE Singapore launched its "Branding for Internationalisation" Programme to help Singapore-based firms develop a global presence. The key initiatives of the program are designed to help companies research brand strategies, better understand their brand needs, audit their brands, identify brand opportunities and bridge the gap between brand awareness and investment. Since its implementation, more than 600 executives have received training in branding through customized workshops, seminars and conferences.

IE Singapore's 'BrandPact' is a multi-agency initiative developed to meet the varied brand development needs of local enterprises as they grow and expand within Singapore and into the global marketplace. BrandPact will support both firm-level branding capability development as well as industry-wide branding efforts. This holistic initiative aims to raise awareness and understanding of branding, develop brand-savvy executives and act as a catalyst for the adoption of branding as a strategy for business competitiveness.

(http://www.iesingapore.gov.sg/events/index.jsp?vert=BZ&secfield=2).

IE Singapore also has an on-line diagnostic brand assessment toolkit to help interested companies conduct a general self-assessment to test their brand status. This analytical virtual scorecard helps businesses to understand better some of the possible issues to consider before deciding to embark on branding.

# 3. Brand Awards

IE Singapore holds the Singapore Brand Award ceremony annually to identify and recognise the 15 Most Valuable Singaporean brands. The award is purely a desktop exercise, using only publicly available information. The valuation process adopts the

same internationally established and accepted methodology as that used in the annual "The Best Global Brands" league table published jointly by Business Week and Interbrand.

#### SINGAPORE BRAND AWARD 2004

Brand	2004 Rank	Value ( S\$M)
Singtel (wireline and wireless)	1	1,874
United Overseas Bank (UOB)	2	1,570
Development Bank of Singapore (DBS)	3	1,165
Asia Pacific Breweries (APB)	4	1,137
Overseas Chinese Bank Corporation (OCBC)	5	724
Great Eastern	6	583
Singapore Airlines (SIA)	7	332
Fraser & Neave (F&N) - (Soft Drinks & 100Plus)	8	137
Brand's	9	126
Tiger Balm	10	115
OSIM	11	106
Creative Technology	12	93
Food Empire	13	73
AKIRA	14	46
Eu Yan Sang	15	44

Source : (<a href="http://www.iesingapore.gov.sg/events/index.jsp?vert=BZ&secfield=2&catfield=7&subfield=215">http://www.iesingapore.gov.sg/events/index.jsp?vert=BZ&secfield=2&catfield=7&subfield=215</a>)

The Association for Small and Medium Enterprises (ASME) has initiated a Singapore Promising Brand Award (SPBA) to recognise SMEs who have shown stellar performances in the communication of their brands. The awards go to businesses who have managed their brands successfully and strategically to generate value. The awards are evaluated by a panel of judges using the following criteria: brand strength/identity, brand culture, integrated brand communications, brand equity and brand performance. By raising the awareness of branding through these awards, the aim is to create more leverage on the brands of Singapore-based companies in order to achieve global recognition. Since its inception in 2001, this is one of the most highly-regarded awards in the business community.

Superbrands is an independent arbiter of branding which publishes a series of books giving insights into world-famous brands. The Singapore Superbrands 2004 was the second edition for the Singaporean market and featured 89 of Singapore's leading local and international brands. The Superbrands Council members assess and grade the brands using the following criteria: customer loyalty, market dominance, longevity, overall market acceptance and goodwill.

Sources: Singapore Country Study: Feasibility of Establishing IP related Business Development Hubs in ASEAN; <a href="http://www.iesingapore.gov.sg">http://www.iesingapore.gov.sg</a>; <a href="http://www.iesingapore.gov.sg">http://www.iesingapore.gov.sg</a>; <a href="http://www.iesingapore.gov.sg">http://www.iesingapore.gov.sg</a>; <a href="http://www.iesingapore.gov.sg">http://www.iesingapore.gov.sg</a>; <a href="http://www.iesingapore.gov.sg">http://www.iesingapore.gov.sg</a></a>

#### D. CONTRIBUTION OF COPYRIGHT

# 1. Automatic Protection

In Singapore, copyright protection is automatically conferred on the author from whom the work originates as soon as it is created and fixed in a material or tangible form. Thus, an author of a work does not need to file for registration to get copyright protection. As long as the work is independently created, it has copyright protection. However, if two separate works, based on the same idea, are created independently, there would be copyright on each independent work.

#### 2. Term

The duration varies according to the type of copyright work concerned.

Literary, dramatic, musical, artistic works	70 years from the end of the year in which the author died.  If the work is published after the death of the author, it lasts for 70 years from the end of the year in which the work was first published.
Published editions of literary, dramatic, musical or artistic works (layout)	25 years from the end of the year in which the edition was first published.
Sound recordings and films	70 years from the end of the year of release of the sound recording or film.
Broadcasts and cable programs	50 years from the end of the year of making the broadcast or cable program.
Performances	70 years from the end of the year of the performance.

# 3. Awareness Programs

The Honour IP (HIP) Alliance is a group of government agencies, private organizations and industry associations with a common interest in pursuing the need for education on IP. In partnership with IPOS, the HIP Alliance teaches people to respect and reward original creative works by 'Saying No! to Piracy'.

(<a href="http://www.ipos.gov.sg/main/index.html">http://www.ipos.gov.sg/main/index.html</a> > Our Programmes > General Public > HIP Alliance)

# 4. New Copyright Provisions

i. Circumvention of Technological Measures

Due to the increasing ease in which digital copyright works can be reproduced and disseminated, and in order for them to be adequately protected, it has become necessary to render legal protection to technological measures employed by copyright owners to prevent unauthorized access or to restrict unauthorized use of their works.

#### ii Rights Management Information

Rights management information includes information identifying the author of a work and the terms and conditions relating to the use of the work. Such information in electronic form may be attached to or embodied in a copy of a work or appear in connection with the communication or making available to the public of a copy of a work.

For both of the above, there is criminal liability for willful infringement by a party for the purpose of commercial advantage

(<a href="http://www.ipos.gov.sg/main/index.html">http://www.ipos.gov.sg/main/index.html</a> > About IP > Copyright > Other Copyright Provisions).

# iii. Liability of Network Service Providers

The Copyright Act provides network service providers (NSP) with limited legal immunity from liability. An NSP is defined as a person who:

- (a) provides services relating to, or provides connections for, the transmission or routing of data (for transmission, routing or providing connections); and/or
- (b) provides or operates facilities for, online services or network access (for system caching, storage and referral).

Under certain conditions, an NSP would not be liable for copyright infringement for tasks carried out such as the transmission, routing or provision of connections, system caching and storage and referral.

# 5. IP Associations

There are several IP Associations in Singapore. They include:

• Business Software Alliance

- International Federation of the Phonographic Industry
- Recording Industry Association (Singapore)
- Recording Industry Performance Singapore Pte Ltd (RIPS)
- International Confederation of Societies of Authors and Composers
- Composers and Authors Society of Singapore Ltd (COMPASS)
- The Copyright Licensing and Administration Society of Singapore Ltd
- The Motion Picture Association
- Music Publishers (S) Ltd (MPS)

RIPS, COMPASS and MPS are examples of collective associations. The presence of these associations is an indication of the importance of copyright protection in Singapore.

# 6. Economic Contribution of Core Copyright Industries in Singapore

NUS (National University of Singapore) Consulting released a study in 2004 evaluating the economic contribution of the core copyright industries in Singapore. Output, the value added and employment were used as the three main indicators of the study. The five core copyright industries refer to the following, in descending order of importance:

- i. Software and Databases
- ii. Press and Literature
- iii. Music, Theatrical Productions and Opera
- iv. Advertising Services
- v. Radio and Television

# Output

In 2001, total output from these five industries amounted to \$12,115.5 million. This was a 1.7% increase from the 2000 amount of \$11,916.3 million. The long-term growth from 1986 to 2001 was at an average compounded rate of 12.8% per annum. From 1986 to 1990, a remarkable short-term growth of 18.2% per annum was achieved.

#### Value Added

In 2001, the core copyright industries generated value added of \$4,310.4 million or 2.8% of the GDP. This showed a decline of 5.4% compared to 2000 when the value added was \$4,554.4 million while the GDP contracted by 3.5%. The core copyright industries outperformed the economy in terms of long-term growth from 1986 to 2001 at 12.8% annually, being 3.2% points above the 9.6% attained by the economy during the same period. The best 5-year performance of these industries also coincided with the best overall growth of the nation between 1986 and 1990, with the core copyright industries growing at 18.9% against the economy's 14.4% per annum.

# **Employment**

In 2001, the core copyright industries had a total of 72,552 employees, which accounted for 3.5% of the labor force. This was a 3% increase compared to 2000 when the employees numbered 70,430. The years between 1990 and 1995 saw these industries' workforce rising at a remarkable 7.9% per annum compared to the 2.1% growth in the economy during the same period.

# **Productivity and Remuneration**

In 2001, the labor productivity of the core copyright industries was \$59,411 of value added per worker. This was a 5.6% increase per annum from \$26,069 in 1986. Such growth from 1986 to 2000 was mainly due to improvements in output efficiency per employee. However in 2001, there was a productivity loss of 8.1% due to a decline in the value added to output ratio. Average remuneration per worker was \$45,198. This meant it was \$1,198 above the \$44,000 achieved in the overall services sector in Singapore.

The study suggests that the core copyright industries have the potential to outperform the overall economy's expansion. However, these industries also seem to have a tendency to contract when the economy contracts.

Sources: NUS Consulting: Economic Contribution of Core Copyright Industries in Singapore; http://www.ipos.gov.sg; http://www.newiplaws.org.sg

# E. VALUATION AND ASSESSMENT OF IP RIGHTS IN BUSINESS ENTERPRISES

Accounting firms and private consulting houses in Singapore, including the four major international accounting firms, have traditionally offered IP valuation services for potential business applications. Generally, SMEs and start-ups perceive these services as an additional cost and an unattractive option because of their limited funds.

Most firms employ their own methods (e.g. market approach, cost approach, income approach, etc) and tools when valuing IP. These methods, however, are not suitable for

every valuation situation. The situation becomes more challenging when a certain degree of sophisticated technical know-how is required, e.g., in new technology fields where no benchmark exists. A lot would then depend on the technology's positioning in the market.

Generally, with the exception of some start-ups, smaller SMEs do not view IP as an asset that can be used to secure funding. IP is usually regarded as a cost that needs more expenditure, something to which they are averse. Thus, IP ranks low on their list of priorities in the face of daily survival. Banks do not have a concrete policy on IP asset securitization because the concept of IP as an asset is still new to Singapore. The SMEs also do not have the habit of listing IP as an asset in their balance sheets.

Start-ups, especially spin-offs which are a result of IP created during research from the two universities, have increased in recent years. In valuation for seed funding, the NUS uses its own in-house expertise which is based on a formula that is a mix of income projection, market trends and the track record and salesmanship of the inventor-entrepreneur.

# FRS 103 – Business Combinations

- For acquisitions for annual periods beginning on or after **July 1, 2004**
- Also for acquisitions before effective date if conditions are satisfied
- Legislated on July 1, 2004

The Council on Corporate Disclosure and Governance (CCDG) issued the Financial Reporting Standard (FRS) 103 to replace the FRS 22. FRS 22 permitted business combinations to be accounted for using one of two methods: the pooling of interests method or the purchase method. Analysts indicated that having two methods of accounting for similar transactions would not allow for the comparability of financial statements. Others argued that having two methods of accounting created incentives for structuring transactions to achieve a desired accounting result, since the two methods can produce different results.

Furthermore, the pooling of interests method was prohibited in Australia, Canada and the United States, and it was thought that it would be advantageous for international standards to converge with those in Australia and North America. Accounting for business combinations varied across jurisdictions in other respects as well. These included the accounting for goodwill and intangible assets acquired in a business combination, the treatment of any excess of the acquirer's interest in the fair values of identifiable net assets acquired over the cost of the business combination, and the recognition of liabilities for terminating or reducing the activities of an acquiree.

Therefore, this FRS has been issued to improve the quality of, and seek international convergence on, the accounting for business combinations, including:

- i. the method of accounting for business combinations;
- ii. the initial measurement of the identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination;
- iii. the recognition of liabilities for terminating or reducing the activities of an acquiree;
- iv. the treatment of any excess of the acquirer's interest in the fair values of identifiable net assets acquired in a business combination over the cost of the combination; and
- v. the accounting for goodwill and intangible assets acquired in a business combination.

Sources: <a href="http://www.ccdg.gov.sg/frs/attachments/2004/FRS\_103.doc">http://www.ccdg.gov.sg/frs/attachments/2004/FRS\_103.doc</a>; Singapore Country Study: Feasibility of Establishing IP related Business Development Hubs in ASEAN

# F. ACCESS TO CAPITAL BASED ON IP ASSETS – FINANCIAL SCHEMES (LOANS, GRANTS) BY GOVERNMENT INSTITUTIONS AND WITH PRIVATE CAPITAL

#### 1. Introduction

Singapore has many financial schemes available for entrepreneurs and researchers. These schemes include seed funding for start-ups, research and development (R&D) grants, loans and subsidies from both public sources and venture funding from private sources.

#### i. Academic Grants

The Agency for Science Technology and Research (A\*STAR), through the Biomedical Research Council (BMRC), provides funding support to research that contributes to Singapore's vision of becoming a premier centre for biomedical research and development. These funds are for researchers in Singapore's public research sector, not employees of A\*STAR-funded research institutes:

• <u>Project Grants</u> - seed funding for promising researchers who are in the early stages of their career to engage in research for up to three years.

- <u>Program Grants</u> funding for an extensive program of research by established researchers for up to five years, in the first instance.
- <u>Co-operative Grants</u> funding interdisciplinary collaborative research involving two or more groups of researchers for five years in the first instance. The collaboration should focus on a common theme and leverage on current strengths of each individual research group.
- <u>Core Competence Grants</u> funding for a research unit that engages in work considered by the BMRC to be of strategic importance. Funding will be for five years in the first instance.
- The <u>Science and Engineering Research Council (SERC) Funding Scheme for Public Sector R&D projects</u> provides 100% funding of direct costs for science and engineering projects for three years.
- The <u>SERC Funding Scheme for Strategic Research Programme</u> provides 100% funding of direct costs for science and engineering projects from universities, research institutes and centres. Projects must have a value of more than \$500,000<sup>#</sup> but less then \$3 million over a three-year period.

# ii. R&D Grants for Companies

The Economic Development Board (EDB), a statutory board of the Ministry of Trade and Industry (MTI), provides R&D grants to startups, local enterprises and large global companies.

- The Research Incentive Scheme for Companies (RISC) provides partial grant for costs resulting from R&D projects. The scheme aims to encourage companies to develop R&D capabilities in strategic technology areas, and support the company in increasing its long-term industrial competitiveness.
- The <u>Innovation Development Scheme (IDS)</u> provides assistance to companies to develop capabilities in the innovation of products, applications and services.
- The <u>Biomedical Sciences Proof of Concept (BMS POC)</u> scheme provides seed funding to support the development of early ideas that are patentable and could lead to the formation of new startups or licensing deals with biomedical science companies.

#### iii. Start-up Grants

(a) Government

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<sup>&</sup>lt;sup>#</sup> All figures quoted are in Singapore dollars, unless stated otherwise.

- Bio\*One Capital, a subsidiary of EDB, administers the <u>Biomedical Sciences Innovate 'N' Create Scheme (BMS INC)</u>. This scheme provides seed funding to support local biomedical start-ups to foster a biomedical sciences entrepreneurial environment in Singapore. Investments are between \$250,000 to \$2 million in the form of equity or convertible loans.
- The Start-up Enterprise Development Scheme (SEEDS) by EDB provides seed funding to start-ups, and offers a dollar-for-dollar match for start-ups. Businesses must show a substantial innovative or intellectual content, high growth potential and scalability for the international market. Every dollar raised by a startup from third-party investors will be matched by EDB, up to a maximum of \$300,000. Third-party investors must invest a minimum of \$75,000. Both SEEDS Capital and third party investors will then take equity stakes in the company proportionate to their investments. About 100 companies have successfully obtained SEEDS funding (May 2005). Successful applicants come from industries such as IT, biotechnology, electronics and e-commerce, media and communications, and nanotechnology.
- A\*STAR's <u>Technology Incubator Program</u> covers up to 85% of R&D costs or up to \$300,000 per year for two years.
- <u>Venture Investment Support for Start-ups (VISS)</u> a \$50 million program that directly co-invests into early stage promising and strategic companies that are based in or linked to Singapore. Start-ups in any industry are eligible for a matching dollar for every two dollars of private investment, up to \$500,000.
  - <u>Patent Application Fund (PAF) Plus</u> by EDB is a scheme to defray the costs of patenting, up to \$30,000, and is available to all Singapore-based SMEs.
  - The Standards, Productivity and Innovation Board (SPRING), another statutory board of the MTI, manages two funding schemes for start-ups:
    - □ The Micro Loan Program is a fixed-interest rate-financing program for start-ups and small enterprises, particularly those that are assetlight and knowledge-intensive. This loan can be used to modernize and automate operations, expand existing businesses and augment working capital needs.
    - ☐ The <u>Loan Insurance Scheme</u> offers loans that suit the risk profile of the borrowers, with the interest rate based on the start-up's credit assessment.

# (b) University

- The National University of Singapore (NUS) has its own <u>Venture Support Fund</u>, which provides seed funding of up to \$300,000 in convertible loans or redeemable preference shares. It recently established a <u>Technology-to-Market Fund (T2M)</u> with an initial \$200,000. T2M provides modest but critical support to selected technologies arising from research projects that need further development to be commercially viable.
- Research at the universities is also supported by the Ministry of Education through its <u>Academic Research Fund</u>.
- The Entrepreneurial Talent Development Fund (ETDF) was started in 2004 to provide funding to Institutes of Higher Learning (IHL) to support their Student Venture Programs. Full-time and part-time students (except part-time students under the continuing education program) are eligible, regardless of nationality. Students who have graduated within a year from their date of application are also eligible if their business venture was started during the time they were students. For every \$3 invested by the ETDF, the IHL and the student must invest \$1 each. The maximum investment by the ETDF is \$50000.00. To date (May 2005), the NUS has used the ETDF to seed seven student companies over the last six-month period. The goal is to seed twenty such companies a year, up to 100 in the five-year life span of the ETDF.

# iv. Venture Capital

- More than 150 local and international venture capital fund management groups are located in Singapore, managing some \$16 billion funds
- The Government has also invested in venture funding. The <u>Technopreneurship Investment Fund (TIF)</u> is a US\$1 billion venture capital fund-of-funds that assists Singapore-based institutions to participate in the local venture capital industry.
- The fund is managed by TIF Ventures (TIFV) and the company's charter is to manage funds of funds, and associated activities with emphasis on harnessing new technology and value-added business building capabilities.
- EDB hosts a DEALS Portal which aims to match companies seeking venture funding to Singapore's venture capital community. One can register and upload the business plan at the DEALS Portal. The portal automatically matches and directs the business plan to the appropriate venture capital in Singapore.

# v. Banks and Finance Institutions

The local banks and finance institutions have many financing and loan schemes to help the SMEs. For example, the Overseas Chinese Banking Corporation (OCBC), is the first to offer venture banking. The TechFinancing Centre offers credit facilities to technology start-ups which have already raised capital from venture capitalists or qualified business angels. The credit terms include items such as working capital, equipment and accounts receivable financing. For a complete description of funding schemes offered by banks and financial institutions available to SMEs, refer to the directory of listings under the 'Financial Grants' section.

Sources: Singapore Country Study: Feasibility of Establishing IP related Business Development Hubs in ASEAN;

http://www.ocbc.com.sg/sme-banking/loans/Lns\_WCF\_BusCashFinancing.shtm;

http://www.hlf.com.sg/loans/smeloan/index.html;

http://www.sif.com.sg/loans\_sme.htm;

http://www.uob.com.sg/pages/business/loans/clloans/;

http://www.hsbc.com.sg/sg/commercial/finance/default.htm;

http://www.singapurafinance.com.sg/webtop/loans/Business/commercial.phtml

#### PART II: SUCCESS STORIES

# Case Study 1

General Information

**COUNTRY: Singapore** 

COMPANY NAME: Merlin MD

CONTACT ADDRESS

Contact Person : Mr. Howard Califano

Designation : CEO

Business Address : 29 Woodlands Industrial Park, #04-13/14

Northtech (Lobby 3) Singapore 757716

Tel No. : 65-6892-0020 Fax No. : 65-6892-0080

E-mail : howard@eastern-gate.com

Home Page (if any) : www.merlinmd.com

# **Description of Success Story:**

Merlin MD is a Singapore-based medical devices company that specializes in developing innovative technologies for the treatment and prevention of stroke. Merlin MD's IP portfolio is primarily focused on patents, as they are developing their own proprietary products as well as licensing selected products/processes from companies from Europe and North America. Their R&D takes pricing and medical requirements of the market into account. For example, when they first introduced their coronary stent into the market, they benchmarked it against existing devices and in doing so were able to enhance their product design to achieve superior performance. Some of these attributes include low profile, improved flexibility, thin stents, low inflation pressure and high radial strength.

# 1. Title:

Case Study 2: Merlin MD

# **2. Type of IP concerned** (e.g. TM, ID, Patent, etc.)

#### **Patents**

Merlin MD is building a patent portfolio around its proprietary technology and submitted five patents to IPOS from 2003-2004 with one application through the PCT. Prior to filing patent applications, the company assessed the technology both internally and with their law office based on prior art searches. Merlin MD will proceed to file for patent protection regionally and internationally in key markets.

To enhance its product development strategy for stroke management and vascular disease, Merlin entered into an exclusive license agreement with The Johns Hopkins University in 2004 for several pioneering patents that could lead to a dominant position in the field of cellular management. Merlin has acquired worldwide patents relating to the use of novel compounds in drug delivery for the treatment of vascular disease. These patents have been filed, examined and granted or awaiting grant.

Merlin MD will continue to file patents to protect products under development and future products that are currently at the concept stage. Their patent portfolio currently includes and will include technologies in the areas of delivery systems for intracranial (IC) and coronary applications, implant devices for IC and coronary applications and cellular management with coating technology.

#### **Trademarks**

They registered the trademark "X\*Calibur" in Singapore in 2003 for a family of coronary products in the treatment and prevention of hemorrhagic and ischemic stroke. They are in the process of filing for the trademark of the company's name, 'Merlin MD'.

**3. Background** (historical conceptualization of the concerned technology, product, business etc.)

Merlin MD was established in August 2002. Strategically headquartered in Singapore, housed in a facility of over 12,000 sq feet in product research and development, quality control, manufacturing, and clean room operations, their medical devices assist interventional neuro-radiologists, neurologists and neurosurgeons in conducting clinical trials on stroke patients.

Merlin has started sales and marketing of its X\*Calibur coronary stent in Asia. Initial sales are in India, Indonesia, and China, and subsequently to the rest of Asia, Latin America and Eastern Europe. Three key centers in India have been established to generate revenues and to build up their brand name. The strategy is to have direct sales support in Singapore as a springboard for the region to provide market control while staying at the cutting edge of technology and market trends.

Merlin has established research collaboration programs with Singapore's National Heart Centre and the Nanyang Technological University for its drug-eluting program.

Merlin MD's product line covers:

For cardiology:

- Merlin Coronary Stent and Delivery System
- PTCA Balloon Catheters

In addition to developing its own products, Merlin MD is also the distributor of Merit Medical U.S.A in the region.

The company's product strategy offered:

- (1) The X\*Calibur IC, which is a unique intracranial stent and delivery platform that can navigate the "Siphon" of the internal carotid artery and access the intracranial arteries. This product has proprietary features with superior platform technology.
- (2) The X\*Calibur Patch, a novel covered stent, for the treatment of aneurysms, which will exclude the aneurysm from the circulatory system by blocking the neck of the aneurysm and redirecting the blood flow. Once it is introduced onto the market, it will catalyze a family of products for the company.

# 4. Management Team

The company's management team has over 60 years of combined experience in medical devices R&D, and commercialization. The team has been awarded over 30 U.S. and global patents in interventional procedures.

# Deepak Gandhi, Chairman

Deepak Gandhi brings over 29 years of experience in medical devices to the Company. Before joining Merlin MD, he was Director of Material Technologies for In-Cube Inc, an incubator research company set up in Silicon Valley. He supported material-related issues for Intra-Pace, one of the incubator's start-ups. Prior to that, he was Executive VP of New Product Development and Chief Technology Officer for Micrus Corporation. While there, he successfully developed a new coil detachment technology that was launched and commercialized in May 2000 in a record time of 18 months. Deepak was a key member of the management team in the establishment of Intella Interventional Systems in 1992, where he held the position of Senior VP. He has worked in several medical device start-ups in various executive capacities. He also successfully founded a medical device company in India to design and manufacture urology, gastroenterology, and ob/gyn products. Between 1981 and 1985, Mr. Gandhi worked for Advanced Cardiovascular Systems (Guidant) as a project manager in extrusion/coating and helped to develop first generation over-the-wire angioplasty catheters and materials. Overall, he has worked in over 10 start-ups specializing in medical devices for the past 25 years. He is the inventor or co-inventor on over 25 issued patents in cardiology, neurology, oncology, and gastroenterology. He is a graduate in chemical engineering from the University of Wisconsin, with an MS in plastics engineering from the University of Lowell, Mass., U.S.A.

# **Howard Califano, CEO**

Howard Califano has been employed in various organizations, holding positions in executive management, on the Board of Directors and as a Consulting Director. Prior to his current positions, he was the Chief Executive Officer for Johns Hopkins Singapore Pte Ltd and Johns Hopkins-NUH International Medical Centre Pte Ltd. As the Chief Executive Officer for Johns Hopkins Singapore Pte Ltd, he led and managed a team of 150 researchers, physicians, administrators and staff to establish a center of excellence in research, education and patient care. From 1995 to 1999, he was Assistant Dean, The Johns Hopkins University, School of Medicine, where he was responsible for the business development activities of the University, including the Office of Technology Licensing, responsible for commercializing all medical discoveries originating there.

#### Michael J. O'Connor, COO

Michael O'Connor brings extensive experience in the operations and strategic growth of medical device companies. At Merlin MD, he leads the company's research management, technology transfer and business development. Prior to joining Merlin, he was VP of Operations for Micrus Corporation. He joined Micrus in March 1998 and was instrumental in the development, pilot phase, and commercializing of their implantable coil and delivery system. Mike was responsible for all operations including; manufacturing, engineering, facilities, quality, materials, customer service, and shipping/receiving. Prior to that, he worked at Cardima as a Senior Process Engineer in charge of production and engineering for the electro-physiology catheter line. Before that he worked as a Manager within the corporate R&D organization. He coordinated and implemented the successful creation of the Pilot Process Development group with Boston Scientific. This organization within BSC was a vertically-integrated engineering, production and management organization with production capabilities for; molding, extrusion, balloon forming, custom devices and catheter assemblies (Neuro, EP, PTA and PTCA). Mike brings to Merlin over 12 years of expertize in manufacturing medical devices. He has a BS from University of Lowell, Mass., U.S.A.

**5. Development and Use of IP in Business Strategy** (Please explain the technology etc. used, elaborate on its development and how the IP concerned is being applied in the business strategy)

Merlin MD builds brand identity through product development. Having an R&D pipeline ensures competitiveness in the market by developing a series of products that will help maintain the company's position in the market. The company has a strong team of engineers/scientists developing these products.

Even though the gestation period for product development can be long, they feel that the value lies in their Intellectual Property. The asset appreciation of their IP will become an important factor in getting a good valuation for their investors when the company positions itself for a public offer or acquisition by one of the major companies in this field.

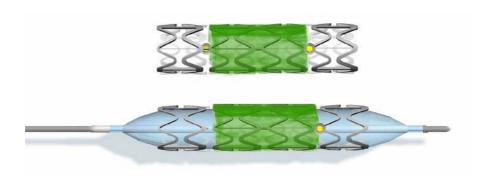
The company's product development strategy is composed of two parts:

Firstly, Merlin MD has developed the X\*Calibur IC, which is a unique intracranial stent and delivery platform that can navigate the "Siphon" of the internal carotid artery and access the intracranial arteries. This product has proprietary features with superior platform technology.

Secondly, Merlin MD is developing a novel covered stent, called the X\*Calibur Patch for the treatment of aneurisms, which will exclude it from the circulatory system by blocking the neck of the aneurysm and redirecting the blood flow. This is a novel approach for treating aneurysms and once it is introduced onto the market, it will catalyze a family of products for the company. Each product will be introduced sequentially with each product being able to expand the type and location of the aneurysm that can be treated.



Bare-stent. Copyright of Merlin MD. All rights reserved.



Patch-stent. Copyright of Merlin MD. All rights reserved.

Merlin has filed five patent applications based on its proprietary technology with IPOS and will proceed to file regional and foreign applications to cover key markets worldwide. Prior to filing these patent applications, the company assessed the technology both internally and with its law office, based on prior art searches.

To enhance its product development strategy for stroke management and vasculature disease, Merlin became a party to the exclusive licensee agreement with The Johns Hopkins University for several pioneering patents that can lead to a dominant position in the field of cellular management. In fact, Merlin has acquired international patents relating to the use of compounds that affect cell behavior positively in the reduction of restenosis. These patents have been filed, examined and granted or are awaiting grant.

Merlin MD plans to continue filing patents to protect products under development and future products that are currently at the concept stage. Their patent portfolio currently includes and will include technologies in the areas of delivery systems for IC and coronary applications, implant devices for IC and coronary applications and cellular management with coating technology.

**6. Impact on Productivity** (e.g. how IP has contributed towards market dominance, company image, sales, quality, productivity and profits)

Merlin MD's key strategy is to leverage on Singapore as their headquarters to reach out to physicians in Asia to conduct new product development and clinical trials. Through these relationships, they aim to equip physicians with the precision devices and accessories they need to treat patients.

They plan to sell their products in Singapore, India, China, Malaysia, Indonesia and then to expand to the rest of South East Asia, Latin America and Eastern Europe. Therefore, Merlin MD leverages on Singapore as a base because of its high quality medical device manufacturing capabilities, strong brand value, growing biomedical capabilities and medical expertise and infrastructure to provide innovative yet cost-effective products to regional markets. Merlin MD's objective is to achieve market dominance in the rapidly-expanding medical device markets within the Asia-Pacific region.

Merlin MD develops its own proprietary technologies, as well as licensing selected products from the U.S. and Europe. This allows Merlin to create a portfolio of products that are ideally suited to the Asia Pacific markets in the shortest time possible. Their products are customized to fit the disease, physiology and market patterns of the untapped Asia Pacific markets. Their R&D takes pricing and medical requirements of the market into account. For example, when they first introduced their coronary stent, they benchmarked it against existing devices on the market and in so doing were able to enhance their product design to achieve superior performance. Some of these attributes include low profile, improved flexibility, thin stents, low inflation pressure and high radial strength.

In order to produce revenue, Merlin has started sales and marketing of its X\*Calibur coronary stent in Asia. Initial sales have come from India, Southeast Asia, China and the rest of Asia. Three key centers in India have been established to generate revenues and to build up the brand name. The strategy is to have direct sales support in Singapore as a springboard for the region to provide market control while staying at the cutting edge of technology and market trends. Merlin hopes to develop relationships with key opinion formers in order to build up its credibility amongst local clinicians who will then endorse their products.

# Case Study 2

#### **GENERAL INFORMATION**

**COUNTRY: Singapore** 

COMPANY NAME: Ya Kun International Pte Ltd

#### CONTACT ADDRESS

Contact Person 1 : Mr. Adrin Loi

Designation : Executive Chairman

Contact Person 2 : Mr. John Ong

Designation : Managing Director

Business Address : 100 Cecil Street ,11<sup>th</sup> Floor, The Globe

Singapore 069532

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E-mail : adrin@yakun.com; john@yakun.com

Home Page (if any) : www.yakun.com

#### A Brief History of Ya Kun

The following is a reproduction of the founder's story found on Ya Kun's website and outlets:

In 1926, with just a black wooden suitcase, 15-year-old Loi Ah Koon boarded an old Chinese junk to set sail from Hainan Island in China to Singapore. After crossing the South China Sea, he finally set foot upon Singaporean soil with uncertainties swirling around in his head. Having neither kith nor kin there, he gravitated towards the local Hainanese community. There, he was introduced to work as an assistant at a Hainanese coffee stall.

He picked up the tricks of the trade fast. Before long, he could hear the jingling of his meager earnings in the pockets of his khaki shorts. This aroused the entrepreneurial spirit in him. He partnered two fellow Chinese immigrants to start their own coffee stall business. When his partners later decided to venture elsewhere on their own, he decided that it would still be business as usual. He continued to serve coffee, tea, eggs and toast to a wide range of customers, including coolies, merchants, money-lenders, police inspectors and boat operators.

Ah Koon got married during one of his visits to his home in China. In 1936, his wife joined him in Singapore. She worked alongside her husband, perfecting her skill of churning out homemade kaya (a local jam made of egg and coconut) to go with their toast. Ever

resourceful, he also began roasting his own coffee. He bought coffee beans, added 'Planta' (a well-known margarine in Singapore) and sugar, and roasted these over firewood at the back of his stall.

He would spend his nights sleeping on the hard wooden countertop at the stall in order to be on time to serve his first customers at five in the morning. When these customers barked their orders, he would, with chalk in hand, scribble their preferences furiously on the same countertop he had slept on. Irate customers never floored him. With a serene smile and a resigned shrug, he kept at his chores. His kind nature always shone through. To those in need he gave generously. For those who read, he provided the daily newspapers. To regular customers, he extended credit.

After more than 15 years in Telok Ayer Basin, an area in Singapore's central business district (CBD), Ah Koon relocated his business to Lau Pa Sat, a popular local market and food center. This was yet another place in the heart of the country's CBD. The stall was then simply called Ya Kun Coffee Stall. The business remained there for another 15 years during which it was awarded 'The Most Courteous Stall in Lau Pa Sat' award. In 1984, it moved back across the street to Telok Ayer Transit Food Market to make way for the revamp of Lau Pa Sat. Finally in 1998, Ya Kun Kaya Toast Coffee Stall settled down at its present site in Far East Square, a trendy part of Singapore's CBD.

#### 1. Title:

Ya Kun Singapore Pte Ltd and Ya Kun International Pte Ltd

# **2.** Type of IP concerned (e.g. TM, ID, Patent, etc.)

Adrin Loi, the youngest son of Ah Koon, was faced with the challenge of how he was to expand the family business. Despite the popularity of Ya Kun's kaya toast and coffee, its business operations were limited to just one outlet. Internal organic growth was considered but raising the resources that were required for such a move proved to be a daunting challenge. After conducting some research, Adrin realized that he had in his hands a substantial IP portfolio that could be used to grow the business. For example, his father had built up a lot of goodwill among Singaporeans resulting in strong brand recognition of the Ya Kun name amongst the local population. With this IP portfolio in hand, new expansion strategies were developed for the company.

# **Trademark**

Adrin had grasped the importance of the company's trademark and filed for international protection of the company's name "Ya Kun" as well as its unique logo. This proved to be an important business move as he later learnt that certain foreign parties had tried filing Ya Kun's trademark in a market in which they were interested. If Ya Kun had not filed for protection earlier, they could have been blocked from entering the market.

In 2001, a company called Ya Kun International Pte Ltd was spun off to franchise its coffee stall business in Singapore and other countries. The new company became the licensee of the Ya Kun trademark, and was itself the owner of the franchise system including the copyrighted manuals and other proprietary know-how and techniques. Ya Kun International has also been given the exclusive world-wide rights to operate and market the business concept.

#### A. Trade Secrets

Another form of IP that Ya Kun has is its trade secrets. The kaya spread is a family recipe developed over many years and is a closely-guarded trade secret. The kaya spread is manufactured in a separate, family-owned factory, and the staff is made up of family members. Another important and closely-guarded trade secret is the well loved Ya Kun coffee which is renowned for its rich, unique and traditional taste. The mixing of the various types of coffee to achieve this special aroma and flavor is done solely by one of Adrin's older brothers.

# B. Copyright

All the Ya Kun outlets have the same posters depicting the ambience of bygone days. The main purpose of these posters is to portray and promote the nostalgia element of Ya Kun. The target audience were those who fell within the 20 to 40 age group, because they were the ones who could understand, appreciate and afford the products offered by Ya Kun. Ya Kun has ensured that it owns the copyright to all the posters, which were developed by the Leo Burnett office in Singapore.

# 3. Background

Before Adrin came to the helm in 1999, Ya Kun's business strategy is best described as being dated. Its business approach was conservative, and lacked modern managerial and business expertise. Furthermore, due to the simple nature of the business model, and the lack of depth and breath of product offerings, it was relatively easy to copy and duplicate. As a result, there was little impetus for change and growth.

In 2000, Adrin brought in a team from FT Consulting, a franchise consulting company, to help develop and expand the business by capitalizing on its IP portfolio. Ya Kun went through a franchise development program with the consultants which enabled it to franchise its business properly to interested parties. Strategies and tools on how best to manage and protect their IP were developed as part of the program.

Just before the launch of the franchise in 2001, the management of Ya Kun International felt that Ya Kun should continue to tap into the nostalgia it represented and provide every customer with the ambience of yesteryear, yet at the same time offer modern-day air-conditioned comfort with a contemporary lifestyle appeal. However, the prices had to remain affordable. The goal was to cater to the local population and local tastes, without duplicating the many Western-styled coffee franchise outlets that were already in existence. The present Ya Kun café concept was born.

# 4. Development and Use of IP in Business Strategy

The management embarked on a franchising model in 2001 and moved away from the 'mom and pop' type of establishment. Franchising is especially effective when companies have limited capital as it allows them to expand rapidly and develop a wider market for their products. The Ya Kun franchise consisted of the following aspects:

- A. Trade secrets like the kaya spread and the special mix of coffee.
- B. Creating adverts that reflected nostalgia for a bygone era.
- C. Marketing a lifestyle concept that emphasized a café-style ambience.
- D. Every outlet was outfitted with the same type of furniture and decor to ensure that all customers enjoyed the same experience.
- E. Focusing on kaya toast and coffee as these food items can be consumed at any time of the day. The menu was also expanded to improve the products offered.
- F. Prices were kept affordable so that there would be mass appeal.
- G. The menu was customized to meet the preferences of the local palate.
- H. The company's factory was accredited with HACCP certification, an international Food Safety Management Standard which ensures high quality in the process of food preparation.

In September 2001, the first Ya Kun franchise outlet opened at Robinson Point in the central business district. The franchisee gave a lot of important feedback about the tastes and preferences of customers, which helped Ya Kun to achieve continuous improvements to their franchise model. To date, there are 20 outlets in Singapore.

**5. Impact on Productivity** (e.g. how IP has contributed towards market dominance, company image, sales, quality, productivity and profits)

Using the strategies and tools developed by the consultants, and further enhancing them inhouse, Ya Kun successfully expanded operations overseas. In June 2003, it granted a Master Franchise for Indonesia. In February and March of 2005, Ya Kun entered into Master Franchise Agreements with Taiwan and South Korea respectively.

In Korea, located at the trendy Apkujung commercial district of Seoul, the first Ya Kun outlet is next to Cine City, a popular movie theatre. A second outlet has been secured and will be opened by the fourth-quarter of 2005. The Managing Principal of the Master Franchisee is confident of opening 20 outlets in the next three years and at least 35 outlets within the next five.

In Taiwan, the first outlet was opened in Taipei's Neihu district. At least ten new outlets have been planned over the next year. The Managing Principal in Taiwan firmly believes that the distinctive business concept and unique products of Ya Kun will help start a new food culture in the very competitive scene of Taiwanese food and beverage.

Ya Kun's overseas expansion plans include constantly seeking out master franchise or direct investment opportunities. Between January 31 and February 5, 2005, the company participated in JETRO's (Japanese External Trade Organization) Invest Japan Study Program. Ten food services companies from around the world were selected for this prestigious trip sponsored by the Japanese Government. Only three of the participating companies were from Asia, with the rest coming from the United States, Europe and Australia. Ya Kun also participated in FOODEX, one of the world's largest food exhibitions held in Tokyo in March 2005, during which it received a positive reaction to its kaya spread. Ya Kun plans to launch its kaya spread in Japan over the next year, and establish its first outlet by early 2007. There are also eight outlets in Indonesia.

With more than 500 applicants hoping to clinch the franchise in Singapore, the company stopped granting local franchises to new applicants in 2004. Although there has been keen overseas franchise interest from countries like Malaysia, Hong Kong, Thailand, the Philippines, Australia, India and China, the company is in no hurry to enter into franchise relationships in these markets. "Franchising is a long-term relationship, and is often likened to a marriage. We would rather be careful in choosing the right partner, in order to ensure that our business remains viable in every country that we go to," said Mr Adrin Loi.

The company was recently awarded the prestigious 'Superbrand' status in Singapore, winning in the Food and Beverage category. It has also received the prestigious SPBA Heritage Brand Award, given to well-known Singaporean brands with at least 40 years of history. The financial returns of franchising for Ya Kun have been robust, as can be seen by the following statistics:

# Approximate revenue contribution Approximate pre-tax net profit contribution

Company-owned	
	72%
	63%
Franchising	
	28%
	37%

#### Conclusion

Ya Kun's experience shows that sound and proper Intellectual Property management can help in making a company very successful. The portfolio of IP – trade secrets, trademarks, copyright and the subsequent branding achievements all came together to help make Ya Kun a popular food and beverage destination for the local population. IP has helped to associate Ya Kun with nostalgia, and a truly homegrown company that appeals to both young and old.

Faced with increasing competition from look-alikes in Singapore, Mr Loi commented: "We welcome healthy competition, because the ultimate beneficiaries will be the consumers. For our part, we will continue to harness the value of our 60-year-old brand, improve our products and operations, and maintain strong tie-ups with Government agencies such as the Singapore Tourism Board and IE Singapore to promote this uniquely Singaporean product. We had a head-start and have a good team, and we intend to leverage on these advantages to make Ya Kun not only a well-known homegrown name, but an international brand that will make Singaporeans proud."

Source: http://www.yakun.com

# PART III

Listing of Manuals, Guidelines and Directories in the Area of Intellectual Property (IP) Portfolio Management

# **COUNTRY: SINGAPORE**

No ·	English Title + Brief Description of its Contents in less than 50 words	Year of Publication	Agency Responsible and Address	Contacts (Tel/Fax/email)
<b>A.</b>	PATENT AND INVENTION RELATED			
1.	Intellectual Property and Biological Resources: Perspectives on Contemporary Issues By drawing together the various strands of the debates in different legal sub-specialties—including patent law, international environmental law, indigenous rights, traditional knowledge, it is hoped that a more complete and balanced picture will emerge of the controversies surrounding the use of the intellectual property system in the commercial exploitation of bioorganic innovation.	Oct 2004	Marshall Cavendish International (Singapore) Private Limited Times Centre, 1 New Industrial Road, Singapore 536196	Catherine Tan Tel: (65) 6-213-9320 E-mail: catherinetan@sg.mar shallcavendish.com  Ivy Liew Tel: (65) 6-213-9493 E-mail: lvyliew@sg.marshall cavendish.com
2.	Singapore Precedents and Forms: Intellectual Property Law Contains succinct commentary on the law and with cross references to related precedents and form for easy reference. Offers practical and easy-to-follow pointers in the commentary to assist the user with the use of the precedents and forms. Providing a wide selection of precedents and forms on assignments, licensing, non-disclosure agreements, agency and distribution agreements which you can select and modify for various factual and situational permutations.	2005	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
3.	Butterworths' Singapore Statues – Intellectual Property (Patent Act/Computer Misuse Act: An Annotation)	2001	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719

4.	Asia Intellectual Property Reports A comprehensive collection of reports of judgments (many previously unreported) on intellectual property law from Hong Kong, Malaysia, India, Philippines, Singapore and Thailand. Subjects include copyright, patents, trademarks, confidential information and passing off.	1993 – 1996	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
5.	Patent Protection Regimes This book covers one type of intellectual property: patents. Patent protection is jurisdictional, the rights associated with a patent being enforceable only in the country or region in which the patent is registered. To obtain patent protection, one would have to understand the procedures and meet requirements as mandated by the law of each country or region.  The authors have written this book in the hope of assisting readers by providing a commentary together with an easy-to-navigate comparative table, highlighting key features of the patent systems of Australia, the European Patent Office, Japan, Malaysia, the United States and Singapore.	2003	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
6.	A Guide to Patent Law in Singapore This book aims to provide a practical guide to the patent system in Singapore. Apart from UK and Australian cases, the book also discusses decisions of Singapore courts, which have played an important role in the development of the law.	2005	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com

7.	A Guide to protecting your ideas, inventions, trademarks and products (2 <sup>nd</sup> Edition)  Catherine Tay explains in simple language the basic principles of patents, trademarks, registered designs and copyrights. This book will guide general readers and professionals on how to protect their rights and the valuable rights that can be acquired under the law. Also includes an informative segment on the ways of exploiting personal patents, trademarks or copyrights for financial gains in the global market place.  *an earlier edition published in 1997 is available.	2002	Times Edition by Marshall Cavendish Times Centre 1 New Industrial Road Singapore 536196	Tel: 65-6213 9300 Fax: 65-6285 4871 Email: tedcsd@sg.marshallc avendish.com
8.	Intellectual Property Law of East Asia  After setting the stage with background chapters dealing with the role of intellectual property in the international marketplace, the basic concepts of intellectual property rights, and the role that they play in common business and commercial transactions, this book provides readers with a country-specific discussion of the laws and regulations relating to patents, copyrights, trademarks, and knowhow. In addition, the book covers important related regulatory areas, including the laws relating to technology transfers and licensing agreements.	1997	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com

9.	Intellectual Property Law in Asia This is a country-by-country survey of the essentials of intellectual property law in the developed and developing nations of eastern and southern Asia. Separate chapters, each written by an authority or authorities in the law of the country he or she covers, clearly explain the intellectual property law regimes in China, Taiwan, Hong Kong, Macao, Japan, Korea, Vietnam, Singapore, Malaysia, Thailand, The Philippines, Indonesia, and India. Each country chapter focuses on the following issues: - current legal instruments and applicable international treaties and agreements - crucial historical considerations - institutions - reform measures - patents, utility models, and designs - trademarks, appellations of origin, and domain names - unfair competition, passing-off, protection of well-known marks, and trade secrets - copyrights, including neighboring rights and database protection - licensing and technology transfer - enforcement procedures	2003	Kluwer Law International 7201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)
10.	Patents Infopack An infopack is a handbook that gives an overview of a form of IP including the application processes (where applicable). An online version of the publication is available at http://www.ipos.gov.sg.	Latest update March 2005	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg

11.	Intellectual Property and U.S. Relations with Indonesia, Malaysia, Singapore and Thailand That too-often-ambiguous commodity, intellectual property, was declared one of the primary goals of foreign economic policy in the mid-1980s by the United States. In the resulting tangle of economic politics and policies, issues of compliance, effectiveness, domestic pressures and foreign policy, and U.S. stature all arose. Intellectual property protection, as Uphoff claims, allows insight into both international trade policy and the economic costs and advantages of this process. Case studies focus on each of the ASEAN governments' decisions on how to respond to U.S. pressure over copyrights and patents. Research, based on existing publications and interviews with government officials and scholars is both timely and illuminating.	1991	Southeast Asia Program Cornell University 180 Uris Hall Ithaca, NY14853-7601	Melanie Moss Distribution & Business Manager 95 Brown Rd. Box 1004 Ithaca, NY 14850  Tel: (607) 255-8038 Fax: (607) 255-7534 mdm44@cornell.edu
12.	Guide to Regional Intellectual Property Laws for Libraries  The aim of the Guide to Regional Intellectual Property Laws for Librarians is to 'produce a practical guide for librarians in ASEAN to understand the intellectual property issues involved in running a library service in the new digital age'. Throughout the guidebook, the collaborators have endeavored to add value to a mere presentation of the ASEAN intellectual property laws with a liberal dose of excellent advice on what librarians should or should not do in certain situations. Furthermore, in the chapter on new technology issues, the authors have also been able to bring into sharp focus some of the technical and legal issues that will confront libraries as they navigate their way in the information society.	2002	National Library Board 100 Victoria Street Singapore 188064 Baker & McKenzie #27-01 Millenia Tower 1 Temasek Avenue Singapore 039192	Tel: 6332-3255 Email: helpdesk@nlb.gov.sg  Tel: 6338 1888 Fax: 6337 5100 Email: singapore.info@bake rnet.com
13.	IP Protection in Asia : Practical Strategies Abstract not available	1996	Asia Law & Practice 5/F Printing House, 6 Duddell St, Central, Hong Kong	Tel: 852 2523 3399 Fax: 852 2815 9466 Email: enquiries@alphk.com

14.	APAA IP Digest [Journal] Abstract not available		Asian Patent Attorneys Association	info@apaaonline.org
В.	INDUSTRIAL DESIGN RELATED			
1.	Singapore Precedents and Forms: Intellectual Property Law Contains succinct commentary on the law and with cross-references to related precedents and form for easy reference. Offers practical and easy-to-follow pointers in the commentary to assist the user with the use of the precedents and forms. Providing a wide selection of precedents and forms on assignments, licensing, non-disclosure agreements, agency and distribution agreements which you can select and modify for various factual and situational permutations.	2005	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
2.	A Guide to protecting your ideas, inventions, trademarks and products (2 <sup>nd</sup> Edition)  Catherine Tay explains in simple language the basic principles of patents, trademarks, registered designs and copyrights. This book will guide general readers and professionals on how to protect their rights and the valuable rights that can be acquired under the law. Also includes an informative segment on the ways of exploiting personal patents, trademarks or copyrights for financial gains in the global market place.  *an earlier edition published in 1997 is available.	2002	Times Edition by Marshall Cavendish Times Centre 1 New Industrial Road Singapore 536196	Tel: 65-6213 9300 Fax: 65-6285 4871 Email: tedcsd@sg.marshallc avendish.com

3.	Intellectual Property Law of East Asia  After setting the stage with background chapters dealing with the role of intellectual property in the international marketplace, the basic concepts of intellectual property rights, and the role that they play in common business and commercial transactions, this book provides readers with a country-specific discussion of the laws and regulations relating to patents, copyrights, trademarks, and knowhow. In addition, the book covers important related regulatory areas, including the laws relating to technology transfers and licensing agreements.	1997	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com
4.	Intellectual Property Law in Asia This is a country-by-country survey of the essentials of intellectual property law in the developed and developing nations of eastern and southern Asia. Separate chapters, each written by an authority or authorities in the law of the country he or she covers, clearly explain the intellectual property law regimes in China, Taiwan, Hong Kong, Macao, Japan, Korea, Vietnam, Singapore, Malaysia, Thailand, The Philippines, Indonesia, and India. Each country chapter focuses on the following issues:  - current legal instruments and applicable international treaties and agreements  - crucial historical considerations  - institutions  - reform measures  - patents, utility models, and designs  - trademarks, appellations of origin, and domain names  - unfair competition, passing-off, protection of well-known marks, and trade secrets  - copyrights, including neighbouring rights and database protection  - licensing and technology transfer  - enforcement procedures	2003	Kluwer Law International 7201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)

5.	Designs Infopack An infopack is a handbook that gives an overview of a form of IP including the application processes (where applicable). An online version of the publication is available at http://www.ipos.gov.sg.	Latest update March 2005	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	IPOS IPERC Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg
6.	Intellectual Property and U.S. Relations with Indonesia, Malaysia, Singapore and Thailand That too-often-ambiguous commodity, intellectual property, was declared one of the primary goals of foreign economic policy in the mid-1980s by the United States. In the resulting tangle of economic politics and policies, issues of compliance, effectiveness, domestic pressures and foreign policy, and U.S. stature all arose. Intellectual property protection, as Uphoff claims, allows insight into both international trade policy and the economic costs and advantages of this process. Case studies focus on each of the ASEAN governments' decisions on how to respond to U.S. pressure over copyrights and patents. Research, based on existing publications and interviews with government officials and scholars, is both timely and illuminating.	1991	Southeast Asia Program Cornell University 180 Uris Hall Ithaca, NY14853-7601	Melanie Moss Distribution & Business Manager 95 Brown Rd. Box 1004 Ithaca, NY 14850  Tel: (607) 255-8038 Fax: (607) 255-7534 mdm44@cornell.edu
7.	Guide to Regional Intellectual Property Laws for Libraries  The aims of the Guide to Regional Intellectual Property Laws for Librarians is to 'produce a practical guide for librarians in ASEAN to understand the intellectual property issues involved in running a library service in the new digital age'. Throughout the guidebook, the collaborators have endeavoured to add value to a mere presentation of the ASEAN intellectual property laws with a liberal dose of excellent advice on what librarians should or should not do in certain situations. Furthermore, in the chapter on new technology issues, the authors have also been able to bring into sharp focus some of the technical and legal issues that will confront libraries as they navigate their way in the information society.	2002	National Library Board 100 Victoria Street Singapore 188064  Baker & McKenzie #27-01 Millenia Tower 1 Temasek Avenue Singapore 039192	Tel: 6332-3255 Email: helpdesk@nlb.gov.sg  Tel: 6338 1888 Fax: 6337 5100 Email: singapore.info@bake rnet.com

8.	IP Protection in Asia : Practical Strategies Blurb not available	1996	Asia Law & Practice 5/F Printing House, 6 Duddell St, Central, Hong Kong	Tel: 852 2523 3399 Fax: 852 2815 9466 Email: enquiries@alphk.com
9.	APAA IP Digest [Journal] Abstract not available		Asian Patent Attorneys Association	info@apaaonline.org
C.	TRADEMARK RELATED			
1.	Singapore Precedents and Forms: Intellectual Property Law Contains a succinct commentary on the law and with cross references to related precedents and form for easy reference. Offers practical and easy- to-follow pointers in the commentary to assist the user with the use of the precedents and forms. Providing a wide selection of precedents and forms on assignments, licensing, non- disclosure agreements, agency and distribution agreements which you can select and modify for various factual and situational permutations.	2005	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
2.	Asia Intellectual Property Reports A comprehensive collection of reports of judgments (many previously unreported) on intellectual property law from Hong Kong, Malaysia, India, Philippines, Singapore and Thailand. Subjects include copyright, patents, trademarks, confidential information and passing off.	1993 – 1996	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
3.	Law of Trade Marks and Passing Off in Singapore The Law of Trade Marks and Passing Off in Singapore deals comprehensively with the events and developments that led up to the new Act, as well as the novel principles and concepts that have been incorporated in the Act. It also examines decisions of the European Court of Justice and the UK courts on equivalent provisions of the Act and expounds their impact on the law in Singapore.	2003	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com

4.	A Guide to protecting your ideas, inventions, trademarks and products (2 <sup>nd</sup> Edition)  Catherine Tay explains in simple language the basic principles of patents, trademarks, registered designs and copyrights. This book will teach general readers and professionals how to protect their rights and the valuable rights that can be acquired under the law. Also includes an informative segment on the ways of exploiting personal patents, trademarks or copyrights for financial gains in the global market place.  *an earlier edition published in 1997 is available.	2002	Times Edition by Marshall Cavendish Times Centre 1 New Industrial Road Singapore 536196	Tel: 65-6213 9300 Fax: 65-6285 4871 Email: tedcsd@sg.marshallc avendish.com
5.	Intellectual Property Law of East Asia  After setting the stage with background chapters dealing with the role of intellectual property in the international marketplace, the basic concepts of intellectual property rights, and the role that they play in common business and commercial transactions, this book provides readers with a country-specific discussion of the laws and regulations relating to patents, copyrights, trademarks, and knowhow. In addition, the book covers important related regulatory areas, including the laws relating to technology transfers and licensing agreements.	1997	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n.com

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7.	The Protection of Well-Known Marks in Asia This collection of expert essays examines the legal protection of well-known marks both under trademark and unfair competition law in 10 different jurisdictions of the Asia-Pacific region, analysing the still widespread piracy of well-known marks in the context of the underlying legal and cultural concepts.	2000	Kluwer Law International 7201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)
8.	Intellectual Property: Trade Marks Act – A Commentary	2002	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719

9.	Trademarks Infopack An infopack is a handbook that gives an overview of a form of IP including the application processes (where applicable). An online version of the publication is available at http://www.ipos.gov.sg.	Latest update March 2005	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	IPOS IPERC Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg
10.	Intellectual Property and U.S. Relations with Indonesia, Malaysia, Singapore and Thailand That too-often-ambiguous commodity, intellectual property, was declared one of the primary goals of foreign economic policy in the mid-1980s by the United States. In the resulting tangle of economic politics and policies, issues of compliance, effectiveness, domestic pressures and foreign policy, and U.S. stature all arose. Intellectual property protection, as Uphoff claims, allows insight into both international trade policy and the economic costs and advantages of this process. Case studies focus on each of the ASEAN governments' decisions on how to respond to U.S. pressure over copyrights and patents. Research, based on existing publications and interviews with government officials and scholars, is both timely and illuminating.	1991	Southeast Asia Program Cornell University 180 Uris Hall Ithaca, NY14853-7601	Melanie Moss Distribution & Business Manager 95 Brown Rd. Box 1004 Ithaca, NY 14850  Tel: (607) 255-8038 Fax: (607) 255-7534 mdm44@cornell.edu
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13.	APAA IP Digest [Journal] Abstract not available		Asian Patent Attorneys Association	info@apaaonline.org
D.	COPYRIGHT RELATED			
1.	Singapore Precedents and Forms: Intellectual Property Law Contains a succinct commentary on the law and with cross-references to related precedents and form for easy reference. Offers practical and easy-to-follow pointers in the commentary to assist the user with the use of the precedents and forms. Provides a wide selection of precedents and forms on assignments, licensing, non-disclosure agreements, agency and distribution agreements which you can select and modify for various factual and situational permutations.	2005	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
2.	Asia Intellectual Property Reports A comprehensive collection of reports of judgments (many previously unreported) on intellectual property law from Hong Kong, Malaysia, India, Philippines, Singapore and Thailand. Subjects include copyright, patents, trademarks, confidential information and passing off.	1993 – 1996	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
3.	Copy Not Right: be creative, be original, be hip [VCD]  This video by the Honour Intellectual Property (HIP) Alliance, the flagship public awareness initiative of Intellectual Property Office of Singapore (IPOS), aims to educate and promote appropriate use of copyright work.	2004	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	Linda Lim Tel: 6331 6583 Fax: 6331 6562 Email: lim_lee_kuan@ipos. gov.sg

4.	A Guide to protecting your ideas, inventions, trademarks and products (2 <sup>nd</sup> Edition)  Catherine Tay explains in simple language the basic principles of patents, trademarks, registered designs and copyrights. This book will teach general readers and professionals on how to protect their rights and the valuable rights that can be acquired under the law. Also includes an informative segment on the ways of exploiting personal patents, trademarks or copyrights for financial gains in the global market place.  *an earlier edition published in 1997 is available.	2002	Times Edition by Marshall Cavendish Times Centre 1 New Industrial Road Singapore 536196	Tel: 65-6213 9300 Fax: 65-6285 4871 Email: tedcsd@sg.marshallc avendish.com
5.	Intellectual Property Law of East Asia  After setting the stage with background chapters dealing with the role of intellectual property in the international marketplace, the basic concepts of intellectual property rights, and the role that they play in common business and commercial transactions, this book provides readers with a country-specific discussion of the laws and regulations relating to patents, copyrights, trademarks, and knowhow. In addition, the book covers important related regulatory areas, including the laws relating to technology transfers and licensing agreements.	1997	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com

6.	The Law of Copyright in Singapore (2 <sup>nd</sup> edition) As compared to the first edition of this work, which was published over ten years ago following the enactment of the Singapore Copyright Act 1987, the Second Edition contains vast sections of additional material and information pertaining, inter alia, to all jurisprudential and legislative developments relevant and subsequent to the development of the 1987 Act. This edition is particularly welcome, in the light of substantial technological developments and the corresponding legislative and other responses that have come to dominate intellectual property thinking in such pervasive terms.  *an earlier edition published in 1989 is available.	2000	SNP Editions	Tel: Fax: Email:
7.	Intellectual Property Law in Asia This is a country-by-country survey of the essentials of intellectual property law in the developed and developing nations of eastern and southern Asia. Separate chapters, each written by an authority or authorities in the law of the country he or she covers, clearly explain the intellectual property law regimes in China, Taiwan, Hong Kong, Macao, Japan, Korea, Vietnam, Singapore, Malaysia, Thailand, The Philippines, Indonesia, and India. Each country chapter focuses on the following issues:  - current legal instruments and applicable international treaties and agreements  - crucial historical considerations  - institutions  - reform measures  - patents, utility models, and designs  - trademarks, appellations of origin, and domain names  - unfair competition, passing-off, protection of well-known marks, and trade secrets  - copyrights, including neighbouring rights and database protection  - licensing and technology transfer  - enforcement procedures	2003	Kluwer Law International 201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)

8.	Copyright Infopack	Latest	Intellectual	IPOS IPERC
	An infopack is a handbook that gives an overview of a form of IP including the application processes (where applicable).  An online version of the publication is available at http://www.ipos.gov.sg.	update March 2005	Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg
9.	Intellectual Property and U.S. Relations with Indonesia, Malaysia, Singapore and Thailand That too-often-ambiguous commodity, intellectual property, was declared one of the primary goals of foreign economic policy in the mid-1980s by the United States. In the resulting tangle of economic politics and policies, issues of compliance, effectiveness, domestic pressures and foreign policy, and U.S. stature all arose. Intellectual property protection, as Uphoff claims, allows insight into both international trade policy and the economic costs and advantages of this process. Case studies focus on each of the ASEAN governments' decisions on how to respond to U.S. pressure over copyrights and patents. Research, based on existing publications and interviews with government officials and scholars, is both timely and illuminating.	1991	Southeast Asia Program Cornell University 180 Uris Hall Ithaca, NY14853-7601	Melanie Moss Distribution & Business Manager 95 Brown Rd. Box 1004 Ithaca, NY 14850  Tel: (607) 255-8038 Fax: (607) 255-7534 mdm44@cornell.edu
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12.	APAA IP Digest [Journal] Abstract not available		Asian Patent Attorneys Association	info@apaaonline.org
Ε.	BUSINESS RELATED			
1.	LexisNexis Law for Business Series: Intellectual Property Legal issues presented from a business perspective. The growth of new areas like the Internet, E- commerce and bio-technology has emphasised the importance of intellectual property. The ability to identify the intellectual property of a business and then carefully manage those rights and commercially exploit them will give any business a competitive edge. Every successful businessman or CEO should therefore ensure that he is armed with the basic fundamentals of intellectual property law. Intellectual Property Law has been specially prepared to present in a compact volume essential knowledge of the law governing intellectual property in Singapore.	2002	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719
2.	Developing and Managing a Franchise  There are many issues that franchisors and franchisees will have to discuss and contemplate before entering the world of franchising.  With that in mind, the Franchising and Licensing Association (FLA) Singapore and LexisNexis have collaborated to present a publication on franchising to assist entrepreneurs, franchisors and franchisees to understand the concept of developing and managing a franchise.	2004	LexisNexis Singapore 3 Killiney Road #08-08 Winsland House 1, Singapore 239519	Tel: 6733 1380 Fax: 6773 1719

3.	The Business Guide to Singapore Written by local experts, the Business Guide to Singapore is the ultimate Singapore business reference. The Business Guide to Singapore brings together all the information needed to do business in Singapore. The Business Guide to Singapore is one of a series of guides written by experts on Asia for business people needing to know how business is conducted and regulated in Singapore. Most guides tend to focus on cultural issues, rather than the practicalities of business in Singapore. The Business Guides focuses more on the business and legal context, enabling you to avoid costly mistakes.	1997	Butterworth- Heinemann Asia	
4.	Intellectual property protection reforms: (theory, evidence and policy)  In recent years, intellectual property-based industries have become more important to the world's economies. However, while most of the writing on the economics of intellectual property protection policy has been speculative, this book offers a testable economic theory. The theory of natural intellectual property protection reform, analyzes how economic development influences IPR policy and in turn, how IPR reform affects innovation. Empirical support for the theory and a case study based on data gathered from Singapore's software developers are included. The book should be of interest to economics, and those who form economic policy, who work in the information industries or follow Singapore's economic development.	1999	Singapore University Press AS3-01-02 National University of Singapore 3 Arts Link Singapore 117569	Tel: 6776 1148 Fax: 6774 0652 Email: nusbooks@nus.edu.s g

5.	Intellectual Property Law of East Asia  After setting the stage with background chapters dealing with the role of intellectual property in the international marketplace, the basic concepts of intellectual property rights, and the role that they play in common business and commercial transactions, this book provides readers with a country-specific discussion of the laws and regulations relating to patents, copyrights, trademarks, and knowhow. In addition, the book covers important related regulatory areas, including the laws relating to technology transfers and licensing agreements.	1997	Sweet & Maxwell 6 Battery Road #29-03 Singapore 049909	Patrick Tan Tel: 6333 0800 Fax: 6333 0900 Email: Patrick.Tan@thomso n. com
6.	IP Starter IP Starter is a new resource by IPOS to educate businesses on IP issues before they launch a new product. Based on the nature of your product or service and how it distinguishes itself in the marketplace, IP Starter guides you in your IP decisions, from the type of IP protection required to practical ideas on preventing copycats, as well as where to secure protection, among others. IP Starter also offers general information on the possible time and costs involved for the different types of IP protection. Get practical tips from featured case studies and find useful links to experts and government entities for more IP advice.  *an online version is available at http://ipstarter.surfip.gov.sg	2004	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	IPOS IPERC Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg

7.	Intellectual Property Harmonisation within ASEAN and APEC Intellectual Property Harmonisation in ASEAN and APEC investigates the complex issues that lie at the root of this major block to the unhampered global flow of commerce based on intangible assets. By highlighting the background of Asian legal systems, both in terms of culture and intellectual property systems, the authors suggest how the current obstacles towards greater harmonization and integration may be overcome. Defining the accepted principles enshrined in TRIPS, the Paris Convention, and other international agreements, the presentation describes the relatively- successful European experience and then goes on to develop strategic variations geared to relating more precisely to harmonization, integration and co-operation in the East Asian region.	2004	Kluwer Law International 7201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)
8.	Parallel Imports in Asia  Due to the diversity of legal regimes in the jurisdictions covered, reliable information on the regimes of parallel imports in Asia has been hard to come by. Now, Parallel Imports in Asia brings together the insight and experience of fourteen academics and practitioners in this specialized but highly significant field, each highly respected in his or her particular country. Two concise introductory chapters clearly present the economic and legal foundations of the subject matter. Then, thirteen chapters offer in-depth analysis of exhaustion of intellectual property rights and parallel imports for each of twelve Asian jurisdictions-China, Taiwan, Japan, Korea, Vietnam, Thailand, Indonesia, The Philippines, Malaysia, Singapore, Hong Kong, and India-plus the Australasian bloc. With this book, businesses in all of these countriesand in particular India and the Australasian countries-can assess the strength of their IP rights against parallel importation in other parts of Asia.	2004	Kluwer Law International 7201 McKinney Circle Frederick, MD 21704	Tel: 1-800-234-1660 (within the U.S.) +1-301-698-7100 (outside the U.S.)

9.	SCOPE IP: IP Is Your Business – Can You Cope [Marketing Brochure] In today's knowledge-driven economy, IP is a critical resource and its proper management is a core strategy for any business aspiring to be successful. This brochure provides a general overview of what is IP and what is SCOPE IP.	2005	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	Sarah Yeo Tel: 6330 2782 Fax: 6331 6562 Email: ipos_scopeip@ipos.g ov.sg
F.	FINANCIAL GRANTS			
1.	Planning a Business: Financing Your Business [Website] http://www.business.gov.sg/plan/fin- biz-index.htm	Last updated 25 Jan 2005	www.business. gov.sg	
2.	Patent Application Fund PLUS [Website] Singapore wants to encourage inventors to patent inventions and commercialize their inventions. This scheme helps cover some of the costs of filing patent applications. It covers professional and official fees and other related charges of patent filing, but not the cost of maintaining a lapsed patent application due to negligence, the defense of a patent, R&D costs, and charges arising from the transfer of rights.  http://www.sedb.com/edbcorp/sg/en_uk/index/startups/startupfinance/patent_application.html	2004	Intellectual Property Strategic Business Unit Singapore Economic Development Board 250 North Bridge Road #28-00 Raffles City Tower Singapore 179101	Tel: (65) 68326832 Fax: (65) 63342767 Email: IP_enquiry@edb.gov. sg
3.	Assistance Schemes and Programmes: For Innovation/R&D/Intellectual Property [Website] http://www.sedb.com/edbcorp/sg/en _uk/index/startups/assistance_schem es/for_innovation.html	2004	Singapore Economic Development Board 250 North Bridge Road #28-00 Raffles City Tower Singapore 179101	Tel: (65) 68326832 Fax: (65) 68326565
4.	Assistance Schemes for Enterprises [Website] http://www.spring.gov.sg/portal/products/assist/Assistance Schemes for Enterprises.html	2005	SPRING Singapore SPRING Singapore 2 Bukit Merah Central Singapore 159835	Tel: (65) 62786666 Fax: (65) 62786667

5.	Business Cash Financing [Website] http://www.ocbc.com.sg/sme-banking/loans/Lns_WCF_BusCashFinancing.shtm	2004	OCBC Bank 65 Chulia St #01-00 OCBC Centre Singapore 049513	1800 538 1111 (Singapore) (65) 6538 1111 (Overseas) Email: BB- CSC@ocbc.com.sg
6.	SME Loan [Website] http://www.hlf.com.sg/loans/smeloa n/index.html	2005	Hong Leong Finance 16 Raffles Quay #01-05 Hong Leong Building Singapore 048581	Hotline: (65) 64162777 Fax: (65) 64162788 Email: customerservice@hlf. com.sg (for service enquiries) loans@hlf.com.sg (for loan enquiries)
7.	SMEs Financing – Assistance Schemes [Website] http://www.sif.com.sg/loans_sme.ht m		Sing Investments & Finance Limited 135 Cecil Street #01-01 LKN Building Singapore 069536	Tel 6221 9998 Fax 62211098 (Credit Admin) Fax 62250837 (Deposits)
8.	Commercial Loans – SMEs [Website] http://www.uob.com.sg/pages/busin ess/loans/clloans/	2005	United Overseas Bank 80 Raffles Place UOB Plaza 1 Singapore 048624	Tel: 1800 22 66 121
9.	Financing [Website] http://www.hsbc.com.sg/sg/commer cial/finance/default.htm	2005	Hong Kong and Shanghai Bank HSBC Building 21 Collyer Quay #08-01 Singapore 049320	1800 216 9008 (local) 65 6216 9008 (overseas) E-mail: contact@hsbc.com.sg
10.	Loans – Businesses [Website] http://www.singapurafinance.com.sg /webtop/loans/Business/commercial. phtml	2005	Singapura Finance 150, Cecil Street, #01-00, Singapore 069543	Tel: 6880 0633 Fax: 6225 8310 Email: enquiry@singapurafi nance.com.sg

G.	OTHERS			
1.	Plant Varieties Protection Infopack An infopack is a handbook that gives an overview of a form of IP including the application processes (where applicable). An online version of the publication is available at http://www.ipos.gov.sg.	Latest update March 2005	Intellectual Property Office of Singapore 51 Bras Basah Road #06-01 Plaza by the Park Singapore 189554	Tel: 6331 6571 Fax: 6331 6562 Email: ipos_iperc@ipos.gov. sg