

## ICU#3 – Method, raw clusters and reference list

### 1. Method

1. This ICU is based upon a semantic analysis of about 10 000 articles from international Press Agencies, newspapers and specialised journals, collected from June to 15 November 24 2008. By definition, all results presented are 'as of' the period concerned.

2. In addition to Press Agencies News and to specialised journals, the newspapers are the most important ones of about 20 countries: China, Denmark, France, Germany, India, Indonesia, Ireland, Israel, Italy, Japan, Korea, Russia, Spain, Sweden, Swiss, Taiwan, Turkey, UK and the US. On the whole, about 65 sources were monitored for this ICU.

3. The articles are collected because they contain root word: "innovat\*".

4. To deal with open innovation and IPR, we have chosen "IPR" as a departure point (all the articles contain "innovat-", precisising it with words that express a notion of "openness":

- The primary selection of texts contains all documents with IPR, i.e. 312;
- This selection was 'cleaned up' from irrelevant documents (either 'management litterature' or 'companies financial results'), so that only 208 documents remained.
- In this selection, we chose to pick only those with common characteristics of open innovation (cf. Chesbrough et al.), i.e. aca\*, universit\*, network\*, partner\*, collaborati\*, cooperati\* or participati\*.

- In the end, the document base on which the semantic cluster analysis was carried out contained: 169 documents.

### 2. Clustering

**Cluster 1:** technology, innovation, patent, sector, company, industry, research, development, product, business (61 documents)

**Cluster 2:** Microsoft, IBM, Cisco, Lenovo, Google, YouTube, World Bank, SAP, Nokia, Nuance Communications (49 documents)

**Cluster 3:** GlaxoSmithKline, Novartis, Ranbaxy, Ibsa, EBTIC, Celgene, Pfizer, Biocon, Etisalat, Lupin (36 documents)

**Cluster 4:** Basf, trial, protection, strategy, system, future, public, Philips Innovation Campus, tie-up, climate (22 documents)

(NB: 1 document remained unclassified).

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### 3. Reference list

Roche seeks innovative collaborations in China, *China Business Newswire*, 24 November 2008

Mobile phones: The battle for the smart-phone's soul, *The Economist*, 22 November 2008

Two U.S. companies seek to block Samsung imports, *The International Herald Tribune*, 19 November 2008

Singapore's Institute of Microelectronics and Chartered Develop Advanced Fine- Pitch Packaging Solutions at 65nm, *Business Wire*, 17 November 2008

Innovation networks: good ideas from everywhere in the world, *Strategy and Leadership*, 16 November 2008

The networked idealist's advantage, *Strategy and Leadership*, 16 November 2008

Korea Becomes Spectator in 4th Generation Battle, *Korea Times*, 11 November 2008

Wanted: America's top tech exec, *Electronic Engineering Times*, 10 November 2008

Mayor Chuck Reed Presents Inaugural San Jose Prize for Green Vision Innovation to Winners of California Clean Tech Open, *Market Wire*, 07 November 2008

UCB scouts for local alliances as part of global growth plans, *Business Line*, 07 November 2008

Ccea Approves Biotechnology Industry Partnership Programme, *United News of India*, 06 November 2008

Frost & Sullivan Honours Kongsberg Defence & Aerospace with 2008 European Excellence in Research of the Year Award, *PR Newswire*, 04 November 2008

UK: Licensing and intellectual property, *Economist Intelligence Unit-ViewsWire*, 03 November 2008

MonoSol Rx and Midatech Group Enter Collaboration Agreement to Unite Nanoparticle and Thin Film Drug Delivery Technologies, *PR Newswire*, 03 November 2008

Career: go online, *The Statesman (Calcutta India)*, 02 November 2008

The united drive for hybrids, *Financial Express*, 01 November 2008

UCO Banks capital rejig gets nod, *The Economic Times (India)*, 01 November 2008

Science and China's modernization drive, *Business Daily Update*, 31 October 2008

Venezuela: Licensing and intellectual property, *Economist Intelligence Unit-ViewsWire*, 31 October 2008

Protection Of Public Funded Intellectual Property Bill, *United News of India*, 31 October 2008

Think outside the bubble, *The Irish Times*, 31 October 2008

China agriculture: Hungry for more, *Consumer Goods and Retail Forecast*, 30 October 2008

China needs to perfect IPR protection system, *Business Daily Update*, 30 October 2008

Egypt risk: Legal & regulatory risk, *Economist Intelligence Unit- Risk Briefing*, 28 October 2008

India policy: Fostering innovative drug development, *Healthcare and Pharmaceuticals Forecast*, 28 October 2008

Betting on the firm, *Financial Express*, 28 October 2008

Making the medicine go down, *Indian Express*, 28 October 2008

China economy: Making the most of the good earth, *Economist Intelligence Unit-ViewsWire*, 27 October 2008

Special report: It's all in the technique, *Business China*, 27 October 2008

Foresight versus FP7: comparing innovations in healthcare, *Foresight*, 26 October 2008, vol. 10, p. 39

PM urges Europe to do more to combat climate change, *The Economic Times (India)*, 26 October 2008

Detecting and analysing emerging science and technology issues: the EFMN Issue Analysis, *Foresight*, 26 October 2008, vol. 10, p. 90,

PM Seeks Global Cooperation To Eliminate Terror, Achieve Development, *United News of India*, 25 October 2008

Microsoft faces boycott in China over piracy drive, *The Daily Telegraph (UK)*, 25 October 2008

Canada's top law school launches Indian IP regime, *The Indian News*, 24 October 2008 China risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 22 October 2008

South Africa risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 20 October 2008

Digital Britain - The Future Of Communications, *PA News*, 17 October 2008

VaTech nutraceuticals 10 17, *AP Alert - Medical*, 17 October 2008

Bill to boost R&D by private sector in the offing, *United News of India*, 16 October 2008

Hungary risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 15 October 2008

Broader IP Flexibility Urged for Drugmakers, *BioWorld Today*, 15 October 2008, vol. 19, no. 201

Japan: The operating environment, *Economist Intelligence Unit - Executive Briefing*, 13 October 2008

Axesstel Ranked Number 14 in Deloitte's Technology Fast 50 Program for San Diego, *Business Wire*, 13 October 2008

Opportunity Reborn, *Financial Express*, 13 October 2008

Encourage innovation with holistic approach, *The Hindu*, 13 October 2008

India risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 10 October 2008

Full Throttle, *The Economic Times (India)*, 10 October 2008

Secretary-General's Issues Statement On HIV/AIDS At United Nations Headquarters With Companies Working, *US Federal News*, 09 October 2008

On track for a rewarding career, *The Independent (UK)*, 09 October 2008

Why investors plant seed money in certain soil, *Economist Intelligence Unit - Executive Briefing*, 09 October 2008

Mideast's first telecom research centre launched, *TradeArabia*, 09 October 2008

Technology Strategy Board: Pilot procurement scheme for small business technology development targets infections, *M2 PressWire*, 07 October 2008

Innovation centre heralds bold new era for Middle East telecommunications research, *AME Info - Company News*, 07 October 2008

Animating the cartoon industry, *China Business Daily*, 06 October 2008

Gemalto Announces the Filing of an All Cash Tender Offer for Wavocom with The AMF, *Business Wire*, 06 October 2008

Money to be made even after 90% price erosion, *Business Standard*, 06 October 2008

Green people: L.A.'s leading environmental attorneys, *Los Angeles Business Journal*, 06 October 2008

Facebook HQ dives into our rich pool of talent, *The Irish Daily Mail*, 03 October 2008

Ford's Joint Technology Framework targets minority-owned suppliers, *Automotive World*, 03 October 2008

How technology sectors grow: Benchmarking IT industry competitiveness 2008, *Economist Intelligence Unit - Executive Briefing*, 01 October 2008

Wake Forest University Baptist Medical Center Ramps Up Cancer Treatment Capabilities With Stereotactic Systems From Elekta, *Cision*, 30 September 2008

Kane Biotech Has Been Selected as One of Canada's Top 10 Emerging Life Sciences Companies, *MarketWire Canada*, 30 September 2008

Discretionary IT spends down, *Business Line*, 29 September 2008

Bringing global trials home, *Financial Express*, 29 September 2008

The new breed of Indian startups, *The Economic Times (India)*, 26 September 2008

Japan, U.S. Patent Authorities to Strengthen Cooperation, *Jiji (Japan Press News)*, 25 September 2008

Hungary: Licensing and intellectual property, *Economist Intelligence Unit - ViewsWire*, 24 September 2008

Global Expansion of C'elle Proprietary New Service to Launch in Countries in Europe, Latin America and Southeast Asia, *MarketNews Publishing US*, 24 September 2008

Japan: Licensing and intellectual property, *Economist Intelligence Unit - ViewsWire*, 23 September 2008

We are not chasing size but a right strategic fit, *Business Standard*, 22 September 2008

A special report on globalisation: A bigger world, *The Economist*, 20 September 2008

A special report on globalisation: The Empire strikes back, *The Economist*, 20 September 2008

A special report on globalisation: Oil, politics and corruption, *The Economist*, 20 September 2008

Campaign '08, *Los Angeles Times*, Home Edition, 20 September 2008

World economy: Globalisation is entering a new phase, *Economist Intelligence Unit - ViewsWire*, 19 September 2008

Hosiery manufacturing units urged to enhance productivity, *The Hindu*, 19 September 2008

EU to update its information, technology innovation, *The Jerusalem Post*, 17 September 2008

Steering innovation, top-down: Innovation leadership in practice - Part 2, *Jakarta Post (Indonesia)*, 17 September 2008

Celgene Corp. at Bank of America Securities Annual Investment Conference - Final, *FD Wire*, 16 September 2008

China industry: Legal ties, *Economist Intelligence Unit - ViewsWire*, 15 September 2008

As You Were Saying...Barrier to Bay State biotech, *The Boston Herald*, 13 September 2008

A no-brainer of a merger? Investing, *The International Herald Tribune*, 13 September 2008

ITIF Encouraged by Obama, McCain Focus On Innovation Compared To 2004 Candidates, *Turkish Daily News*, 12 September 2008

Applabs Wins 'New Market Entrant Of The Year' Award, *United News of India*, 12 September 2008

CA Nexicon Inc., *AP Alert - HiTech*, 11 September 2008

Get a Mr Fixit, *The Economic Times (India)*, 11 September 2008

A heuristic framework, *Economist Intelligence Unit - Executive Briefing*, 11 September 2008

KV Kamath, Khorakiwala, Goyal clinch top UK Trade & Investment awards, *Financial Express*, 10 September 2008

India and the global knowledge market, *Business Line*, 09 September 2008

Czech Republic risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 08 September 2008

Stereoscopic Television -- Can Hollywood bring 3DTV home?, *The Electronic Engineering Times*, 08 September 2008

Biocon Limited Presents Human Clinical Data on IN-105 (Oral Insulin) at the EASD Meeting in Rome, *Business Wire*, 08 September 2008

Make alliances work, *Business Line*, 08 September 2008

When Academia Puts Profit Ahead of Wonder, *The New York Times*, Late Edition - Final, 07 September 2008

As a nation, India has not focused on invention, *Financial Express*, 05 September 2008

Join the Crowd, *The Independent (UK)*, 02 September 2008

China industry: Wanted: clean-tech firms, *Economist Intelligence Unit - ViewsWire*, 02 September 2008

A New Battle Is Beginning In Branding For the Web, *The New York Times*, 01 September 2008

The future of U.S. Science policy, *The Scientist*, 01 September 2008, vol. 22, no. 9, p. 30

Risky business, *Business China*, 01 September 2008

University Of Alabama-Huntsville, Pratt & Whitney Rocketdyne Sign Innovative Research Collaboration Contract, *US Federal News*, 29 August 2008

Law ministry moots penalty in R&D bill to protect IPR, *The Economic Times (India)*, 28 August 2008

3Com appoints new vice president and corporate controller, *DataMonitor - TechnologyWire*, 27 August 2008

SETLabs to drive Infosys non-linear revenue, *Business Line*, 27 August 2008

Findings from G. Koleda and co-authors provide new insights into patents, *The Scientist*, 27 August 2008

Absolute absolution, *Financial Express*, 24 August 2008

Getting the chemistry right, *The Business Times (Singapore)*, 23 August 2008

Singapore 'the right place to be in', *The Business Times (Singapore)*, 23 August 2008

Australia: Licensing and intellectual property, *Economist Intelligence Unit – ViewsWire*, 21 August 2008

Malaysia risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 20 August 2008

Nuance Communications to Acquire SNAPin Software, *M2 PressWire*, 20 August 2008

BRICs of potential, *Financial Express*, 20 August 2008

Germany: Licensing and intellectual property, *Economist Intelligence Unit - ViewsWire*, 19 August 2008

Convergence ignites growth of open-source collaboration, *The Electronic Engineering Times*, 18 August 2008

Now Playing on YouTube: Clips With Ads on the Side, *The New York Times*, Late Edition - Final, 16 August 2008

Going for the gold, *The Jerusalem Post*, 15 August 2008

Call to focus on knowledge-based economy, *China Business Daily*, 15 August 2008

A rough guide of what it takes to invest in startups, *The Economic Times (India)*, 15 August 2008

Untapped wealth of nutraceutical exports, *Business Line*, 15 August 2008

McCain Unveils Tech Policy, Opposes Net Neutrality Regulations, *TechWebNews*, 14 August 2008

Maveric Systems, IIT Madras Research Park Announce Tie-Up, *United News of India*, 13 August 2008

Greece risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 11 August 2008

Colombia risk: Legal & regulatory risk, *Economist Intelligence Unit - Risk Briefing*, 07 August 2008

LIPi's products destined for museum, *The Jakarta Post (Indonesia)*, 07 August 2008

Covance Conference Call to Discuss its Strategic Collaboration with Eli Lilly - Final, *FD Wire*, 06 August 2008

LIPi warns of illegal research, *The Jakarta Post (Indonesia)*, 06 August 2008

Celgene Corp. at BMO Capital Markets Focus on Healthcare Conference - Final, *FD Wire*, 05 August 2008

Creative innovations from young university students, *The Jakarta Post (Indonesia)*, 05 August 2008

Cutting edge: examples of L.A. companies that have been granted patents in the past year. Each patent represents a significant investment in time and money, *Los Angeles Business Journal*, 04 August 2008, vol. 30, no. 31, p. 23(2)

The next big things: Caltech and Northrop Grumman paced the field of patent fliers in the Business Journal's assessment of local innovation, *Los Angeles Business Journal*, 04 August 2008

It's right time to sensitise the masses, *The Hindu*, 03 August 2008

Automation, IT Find Teamwork Pays, *Control Engineering*, 01 August 2008, vol. 55, no. 8, p. 56

Patent watch: Canica Design gains patent to advance wound closure tech, *Medical Device Daily*, 30 July 2008

IBSA To Cooperate In Health Labs, Traditional Medicines, Drugs, *United News of India*, 29 July 2008

First batch of innovative firms named, *China Business Daily*, 29 July 2008

Bluetooth innovators prep for higher speed, lower power, added value, *The Electronic Engineering Times*, 28 July 2008

IBSA Health Ministers Meeting To Be Held on Thursday, *United News of India*, 27 July 2008

India Brazil and South-Africa to co-operate in health sector, *The Indian News*, 27 July 2008

Infy, TCS lock horns with Red Hat over IT patent, *Financial Express*, 25 July 2008

GlaxoSmithKline PLC - Strategic Priorities, *AFX-CNF*, 23 July 2008

Definitive Agreement to Acquire Pure Networks, *MarketNews Publishing US*, 23 July 2008

Networking Management Software Enables Consumers to Enjoy Digital Technology, *AP Alert - Business*, 23 July 2008

Lifting India's competitive spirit, *Business Line*, 22 July 2008

Prominent Kuwaiti Businessman To Fund \$9 Million Joint Venture For International Launch of i2Telecom's MyGlobalTalk, *Business Wire*, 21 July 2008

Innovating software for the future, *Business Line*, 21 July 2008

Piracy: Look for the silver lining, *The Economist*, 19 July 2008

Intellectual property rights (Letter to the Editor), *The International Herald Tribune*, 16 July 2008

Patent pools may flow in wake of latest alliance, *The Electronic Engineering Times*, 14 July 2008

Cleantech is a business solution to environmental problems, *Financial Express*, 14 July 2008

Amity students hob nob with intellectual property attorneys at seminar, *The Economic Times (India)*, 07 July 2008

Seal of Exclusivity, *Financial Express*, 06 July 2008

Japan, EU business chiefs urge gov'ts push for FTA-plus pact+, *Japan Economic NewsWire*, 04 July 2008

China launches industrial IPR strategy trial, *China Business Daily*, 02 July 2008

Growth Pill, *Financial Express*, 30 June 2008

Computerworld's Infrastructure Management World Names Pilz as, *AP Alert - HiTech*, 30 June 2008

Is sell-out the cure?, *Business Line*, 27 June 2008

And Finally (Mars and the cocoa genome), *Los Angeles Times*, Home Edition, 26 June 2008

Progress in a flat world: How small global business and entrepreneurs can win, *Israel Business Arena*, 25 June 2008

Jintao Addresses Congresses of Chinese Scientists, Engineers in Beijing 23 June, *World News Connexion*, 25 June 2008

The soft touch on hard decisions, *Business Line*, 23 June 2008

New strategy to improve IPR protection, *China Business Daily*, 23 June 2008

Eating into VC's pie, *Financial Express*, 23 June 2008

Download, *The Seattle Times*, 23 June 2008

Patent trading to gather steam, *Financial Express*, 21 June 2008

China, India and climate change: Melting Asia, *The Economist*, 07 June 2008

Open-source hardware - Open sesame, *The Economist*, 07 June 2008

Additive suppliers focus on innovation for future growth, *Journal of Coatings Technology*, 01 June 2008, vol. 5, no. 6, p. 51(6)