



Contribution of IP Offices in Establishing Effective Innovation Systems

The Experience of Korea

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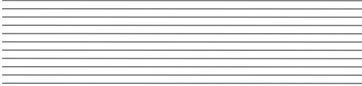
CONTENTS

- ONE**
Intellectual Property : A Key Factor of Innovation
- TWO**
Economic Growth and Intellectual Property in Korea
- THREE**
Role of IP Offices for Supporting Innovation : KIPO's Experience
- FOUR**
International Cooperation with Developing Countries

1

Intellectual Property : A Key Factor of Innovation

KOREAN INTELLECTUAL PROPERTY OFFICE



Knowledge-Based Economy and IP

Change of Value Chain in the Knowledge-Based Economy

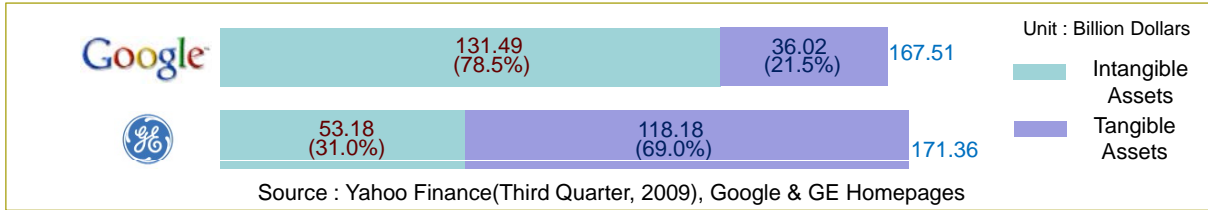
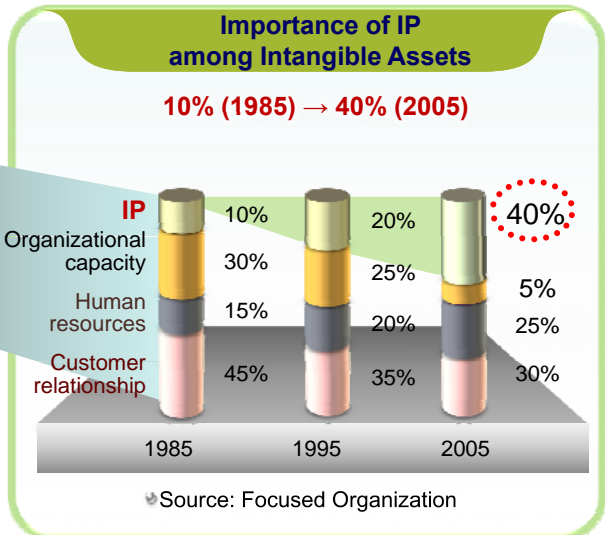
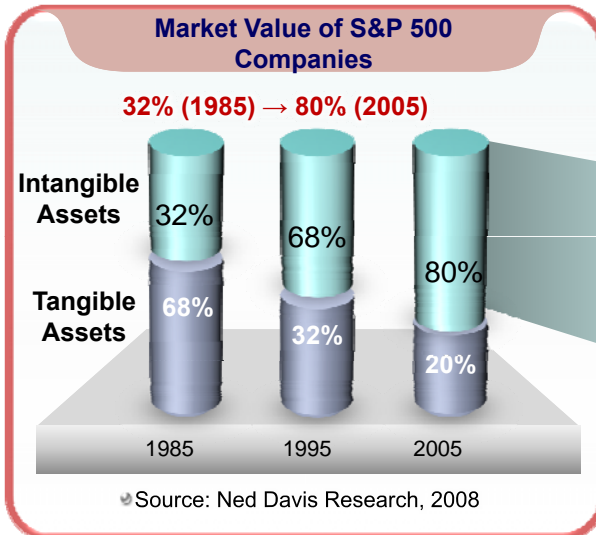
Open-Innovation

- ✓ Increase of highly educated Personnel
* About 400,000 Asian Students in USA
- ✓ The Convergence of Technology
- ✓ Short Life Span of Products



The Competitiveness of Enterprises depends on IP and CR

IP : Essence of Economic Growth and Competitiveness



IP : Core Strategy of Competitiveness



"No patent, No future!"

Jong-Yong Yun, Former Vice-Chairman, Samsung Electronics



"The future fight over intellectual property rights had begun."

"Bill Gates, Profile of a Digital Entrepreneur"



"...for the era to come when only some companies, strong in patents, will cooperate with each other and survive."

Keizo Yamaji, Former CEO, Canon

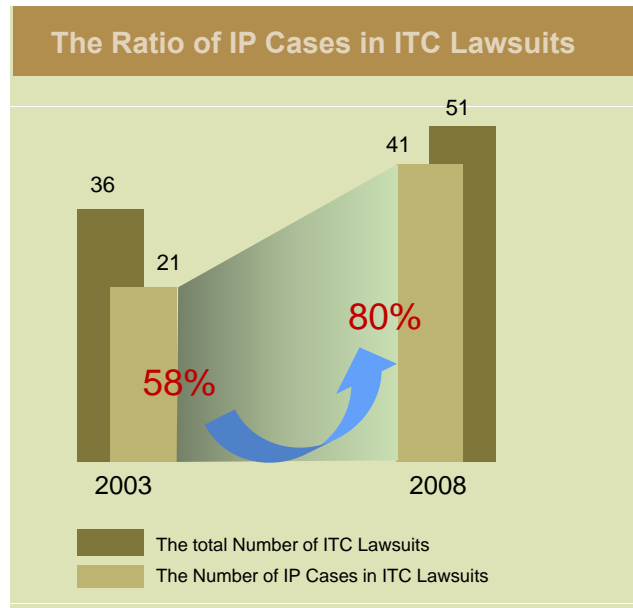


"CEOs will not be successful unless they begin to look at IP as critical to the success of their business."

Mel Sharp, Former IP consultant, Texas Instrument

Lawsuits at US International Trade Commission(USITC)

	IP Cases	*AD, CVD, SG Cases
2003	21	15
2004	26	2
2005	29	7
2006	33	3
2007	35	15
2008	41	10



*AD(Anti-Dumping), CVD(Countervailing Duty), SG(Safeguards)

2

Economic Growth and Intellectual Property in Korea

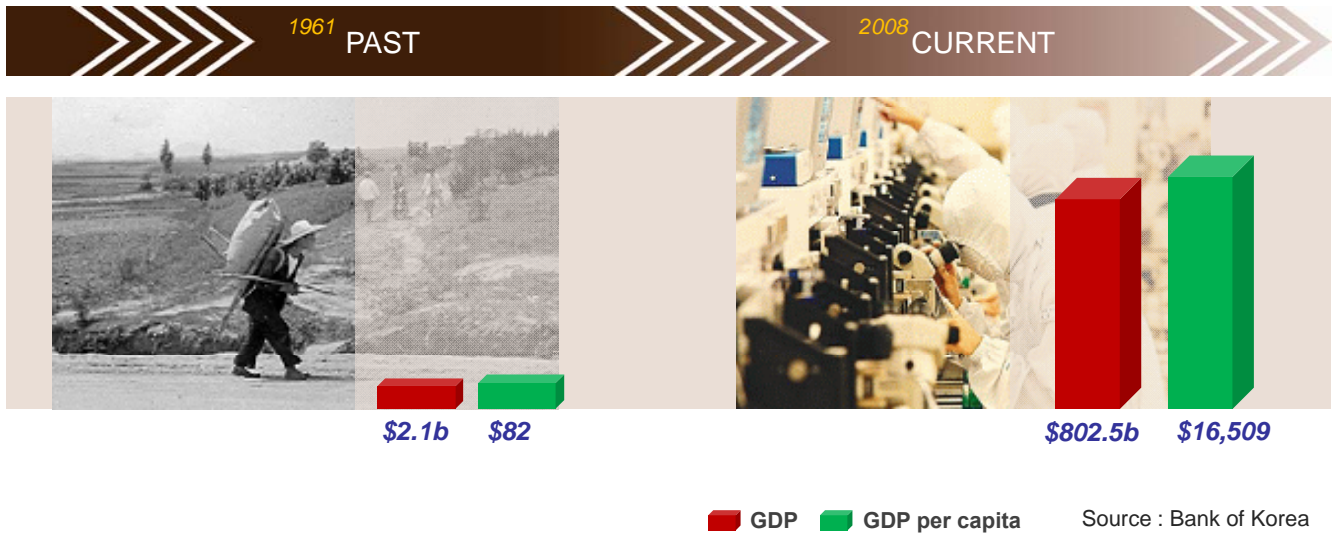


Economic Growth in Korea

Average Annual GDP Growth Rate of 14.3%

Average Annual per capita GDP Growth Rate of 12.7%

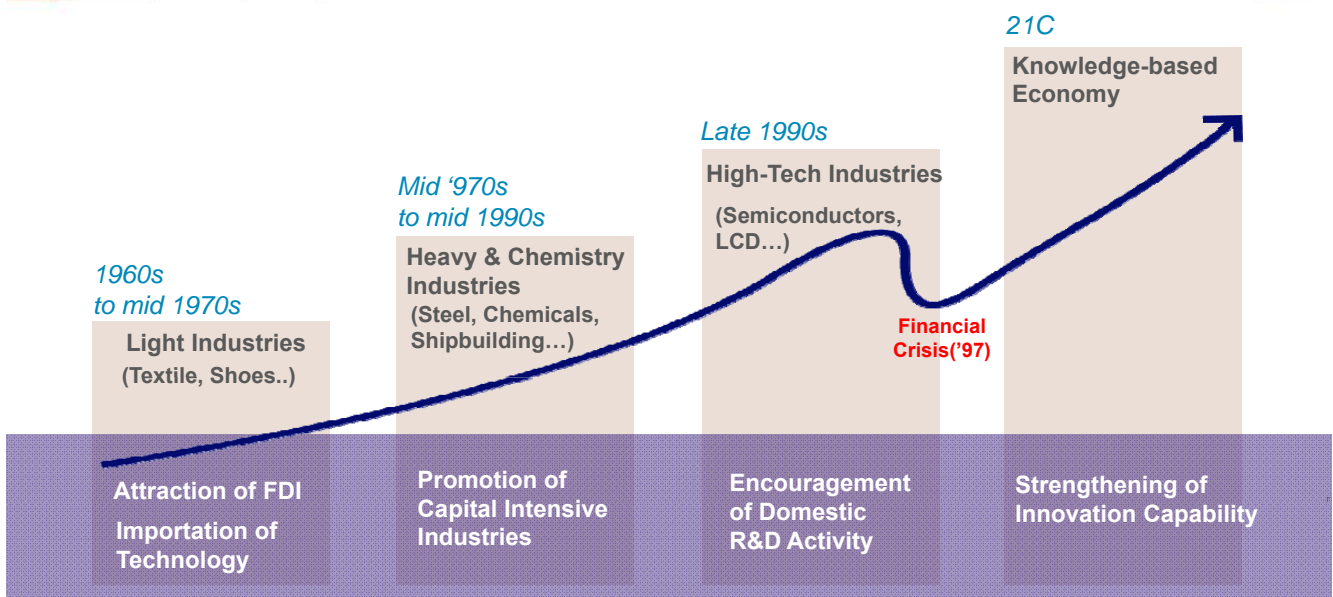
(1961~2005)



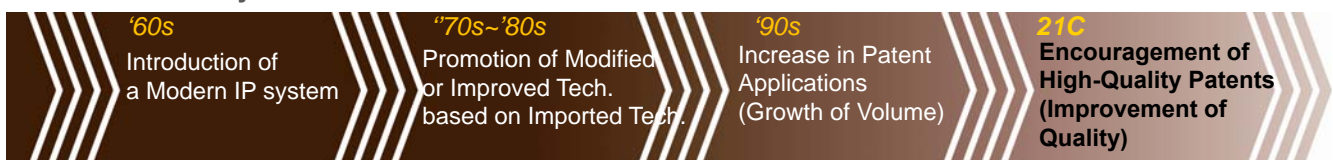
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8

The Stages of Economic Growth in Korea



Flow of IP Policy



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9

Some Facts on Market Power of Korea

Area	Product	World market share (%)	Enterprises
Electronic Industry	Memory Chips	45.1	Samsung Electronics, Hynix Semiconductor
	Digital TV	33.4	Samsung Electronics, LG Electronics
	Mobile Phones	30.5	Samsung Electronics, LG Electronics
Mechanic Industry	LNG carriers	63.0	Hyundai Heavy Industries, Samsung Heavy Industries, Daewoo Shipbuilding & Marine Engineering Co.
	Large diesel engines for ships	59.6	Hyundai Heavy Industries, Doosan Engine Co., STX Heavy Industries
	Automobiles	7.8	Hyundai Motors, Kia Motors
Chemical Industry	Petroleum Products	8.1	SK Energy, S-Oil, GS
	Petrochemical products	5.5	LG Chemical, YEOCHUN NCC, Honam, Petrochemical Corp.
	Textile Products	5.7	Hyosung, Kolon, Cheil Industries



Semiconductors

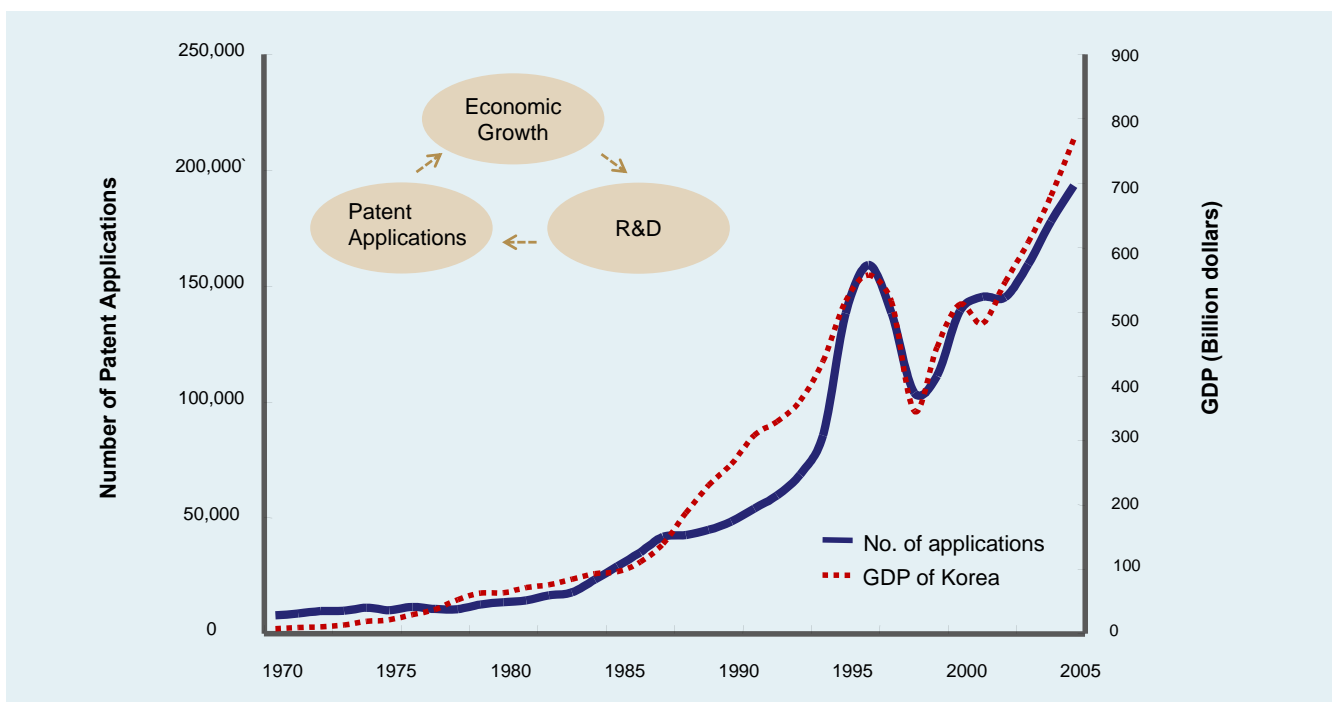


Mobile Phones



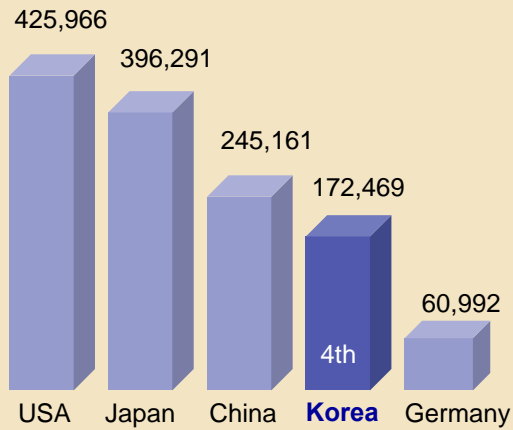
LNG Carriers

Patent Applications and Economic Growth in Korea



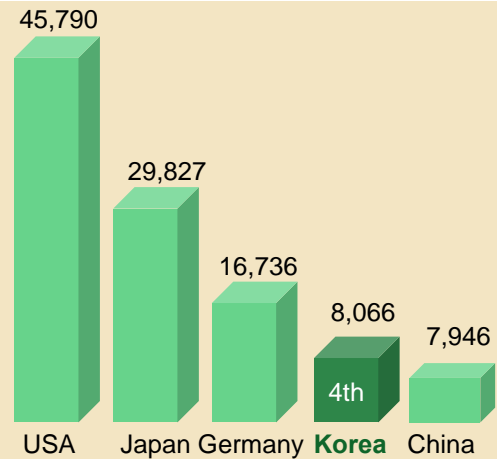
Korea's Status in Intellectual Property - 1

Number of Patent Applications (Year:2008)



Source : WIPO Intellectual Property Indicators 2009

Number of PCT Applications (2009 Estimate)

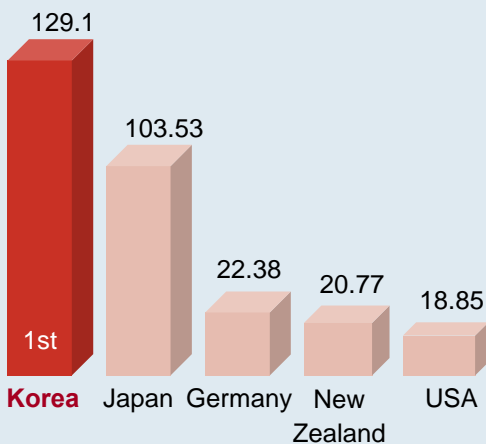


Source : WIPO Press Release (Feb, 2010)

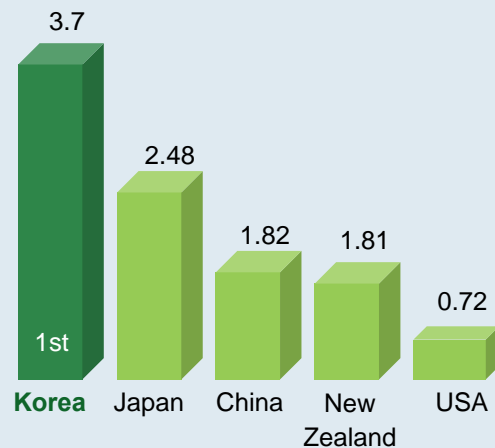
Korea's Status in Intellectual Property - 2

Source : WIPO Intellectual Property Indicators 2009

Number of Resident Filings per \$billion of GDP (Year:2007)



Number of Resident Filings per \$million of R&D Expenditure (Year:2007)

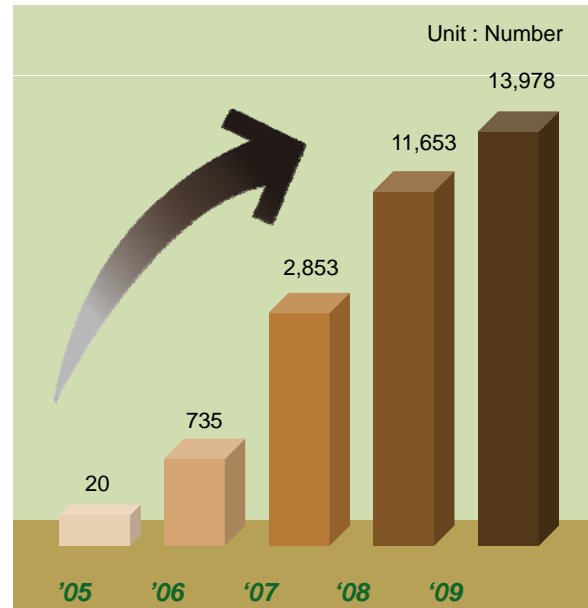


Korea's Status in Intellectual Property - 3

PCT International Searches and Examinations for 10 Countries

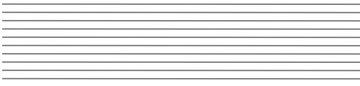


PCT International Search Request from Foreign Applicants | Microsoft 3M hp

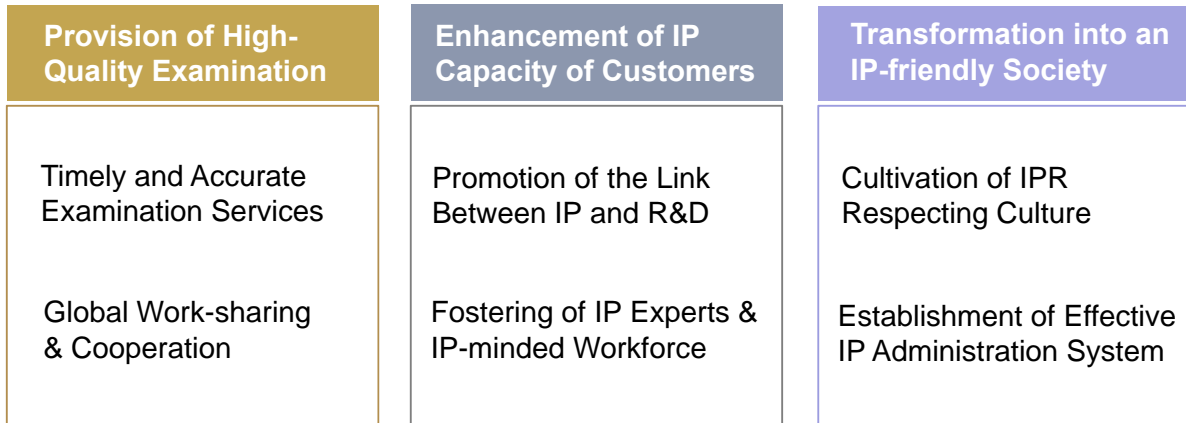


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Role of IP Offices for Supporting Innovation : KIPO's Experience



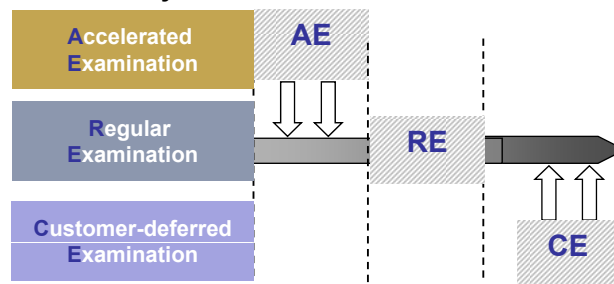
Sustainable Economic Growth with Intellectual Property



(1) Timely and Accurate Examination Services

Customer-tailored Examination and Trial Services

✓ Three Track Examination and Trial System



< Three-Track Examination System >

Enhancement of Expertise of Examiners and Administrative Judge

✓ Increase of the Proportion of Specialists (Ph.D, Lawyers, etc)

(2002) 22.7% → (2010) 48.6%

Quality Control of Examination & Trial

✓ Examination & Trial Excellence Plan

(2) Global Work-Sharing & Cooperation

Background

- ✓ Increase of **Efficiency and Quality** of Patent Examination
- ✓ Needs of **International Consistency** of Examination Result

Work-sharing Project

- ✓ **Patent Prosecution Highway (PPH)** with Seven offices
- Japan, USA, Denmark, UK, Canada, Russia, Finland
- ✓ **SHARE** Project with USA

IP5 Cooperation Framework

- ✓ Discussion on **Work-sharing and Harmonization** of Patent System among EPO, IPO, KIPO, SIPO, USPTO
- ✓ 10 Foundation Project
- ✓ IP5 Examination Workshop



“Globally Harmonized IP System”

(3) Promotion of the Link Between IP and R&D

Fostering of SMEs that are strong in IP

- ✓ To Spread the Practice to use Patents for efficient R&D
- ✓ Providing **Customized Patent Consultation and Training**
- ✓ Consultation on Design & Brand Management Strategy



Improvement of IP Competence of Universities & Public Research Institutes

- ✓ Creation of **IP-Producing Industries** for Acquiring Rights from Ideas
- Support for Establishing Invention Capital
- ✓ **Dispatch IP Experts** to Universities Conducting National R&D Projects

Establishment of a Corporate IP Cooperation Network

- ✓ National R&D IP Forum; Council for IPR Managers
- ✓ Korea Intellectual Property Association(KINPA)

(4) Fostering of IP-Experts & IP-Minded Workforce

Fostering of Creative IP-based Entrepreneurs

- ✓ Fostering Next Generation Talents like Bill Gates
- ✓ Cooperation with KAIST and POSTECH for the Education System



Enhancement of University IP Education

- ✓ Patent Lectures (31 Universities; 74 Courses)
- ✓ Enhancing IP term Project Participation



IP Master's Course (KAIST, HONGIK University, Seoul National University)

- ✓ Fostering of IP-Minded Patent Engineers
- ✓ Interdisciplinary Courses : Engineering, Management, Law



(5) Cultivation of IPR Respecting Culture

Disseminate Public Awareness Programs on IP Protection

- ✓ Publicity through various Online and Offline Media
- ✓ Practical Campaign with NGOs
 - “Puling out Counterfeit Products from my Shopping Basket”

Strengthen Anti-counterfeiting Measures

- ✓ Establishment of Regional Offices to Crackdown Counterfeit Products
- ✓ Online Monitoring System on Counterfeit Products



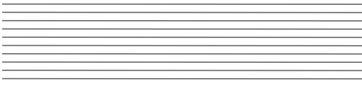
(6) Establishment of Effective IP Administration System

Nationwide IP-Friendly Environment



4

International Cooperation with Developing Countries



Contribution to IP Communities

“Korea became a chair and host of the G-20 Summit this year”

“Korea became the first country in the world that emerged **from the status of an aid beneficiary to become a donor**”

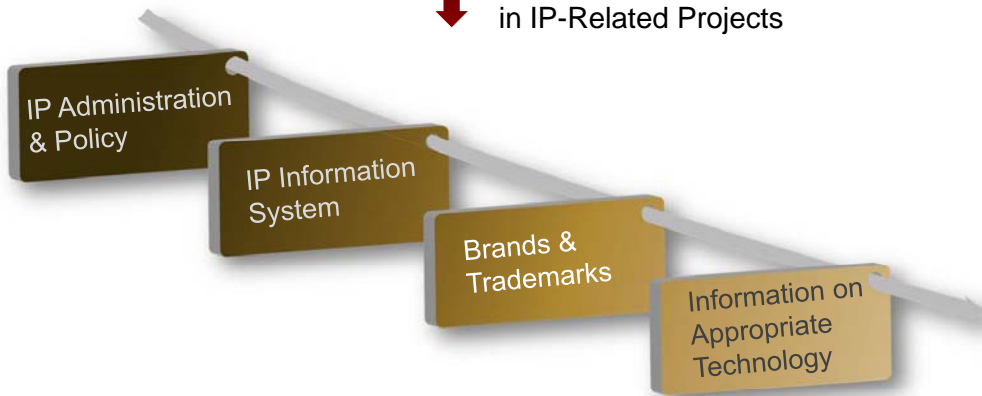
“We need to continue to march forward to make an even greater Korea”

(January 2010, The President New Year Message)



Lee Myung-BaK
President
ROK

↓ Assistance for Developing Countries
in IP-Related Projects



Policy Consultation and IP Automation System

Sharing our Experience of IP Development

IP Administration & Policy Advice

- ✓ Consultation on IP Policy
- ✓ Education for Patent Examiners

IP Information System

- ✓ Consultation on Information Strategic Plan
- ✓ Feasibility Study for Technical Cooperation
- ✓ IP e-Learning(IP Panorama, IP Xpedite)



<IP Panorama>


- **English** in 2007
- **Thai** in 2009
- **Arabic** in 2010
- To be developed into **Spanish, French, Chinese, Russian, Polish**

Support for Brands & Trademarks

To Help Local Communities raise their Income Through the Use of IP,
especially by using Brands and Trademarks for Local Products of Developing countries

East Timorese Coffee
(Imported by Korea YMCA)



↳ "One Village One Brand" Project with APEC  (June 2010, Seoul)

Technological Solutions for Basic Needs

To Provide Developing Countries with Technological Solutions to Livelihood Issues
To Use of Patent Information to transfer Appropriate Technology(AT)

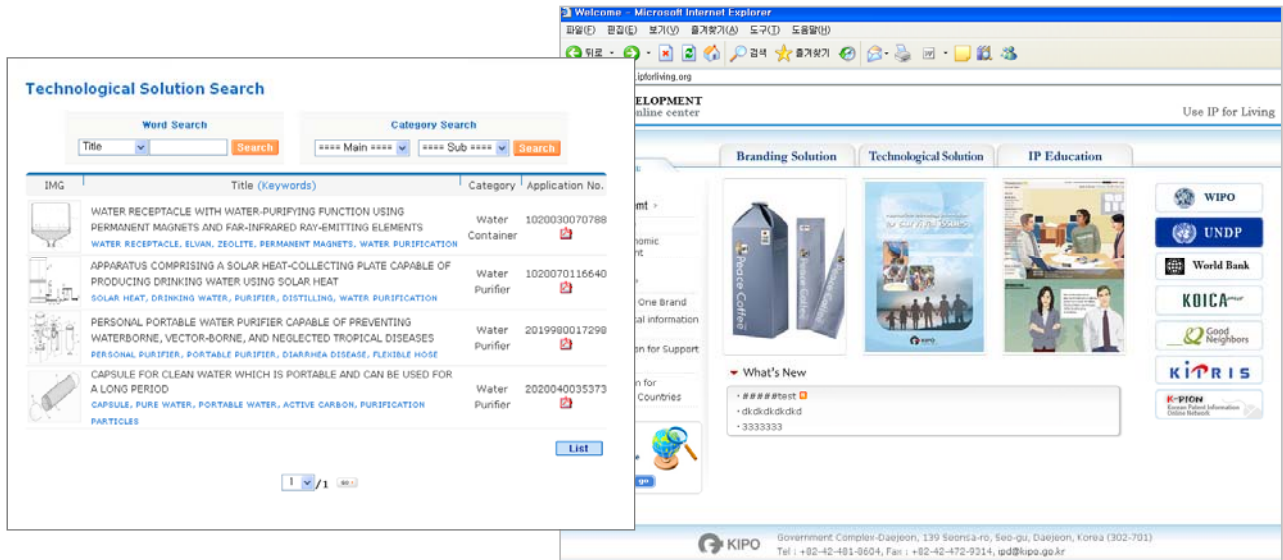
Primary Categories	Sub-categories
Water (72)	Purifiers (51), Containers (21)
Energy (38)	Generator (17), Heaters (21)
Health (39)	Artificial (6), Storage (6), Lifesaving (7), Insects (20)
Agriculture (31)	Equipment (12), Methods (7), Tools (12)
Transport (11)	Vehicles (9), Handles (2)
Shelter (9)	Structures (5), Materials (4)

Appropriate Technology Database(200 Inventions)



The Center Provides Information on the Use of IP for Development

- ✓ Branding Solution
- ✓ Technological Solution (Appropriate Technology Database)
- ✓ Contents of IP Education (IP Panorama, IP Xpedite)



Memorandum of Understanding with GoodNeighbors

To Support for Sustainable Green Growth of Developing Countries
To Make a Successful Model of Economic Development by Use of IP



About Good Neighbors

- A Non-Profit, Non-Government Organization that Originated in 1991
- Major Projects : Education, Child Care, Agriculture Development, Community Development, Health and Sanitation, Environmental Improvement,...
- 106 Field Offices at 24 Countries(Africa, Asia, South America)

Projects for Chad (In Progress)



Dried Mango

: to Increase Incomes for Local Farmers



Sugar Cane Charcoal

: to Improve the Quality of Life



- Development of Brands and Trademarks for Dried Mango
- Development of Manufacturing Technology from Appropriate Technology
- Manufacture of prototypes



- Foundation of a Social Enterprise at Chad (June 2010)
- Production of Sugar Cane Charcoal and Dried Mango
- Return profits to Chadian People (Foundation of Schools, Well Drilling)



Thank you very much!
감사합니다!
謝謝



Баярлалаа
धन्यवाद