



Promotion of Innovation: Usefulness and Value of Patent Information for Public and Private Sectors

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Promotion of Innovation: Example of Illumination



- Example of agriculture tools



(cont'd)





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Example of cellphones

-Cellphones used around 1970



-Cellphones used around 1990



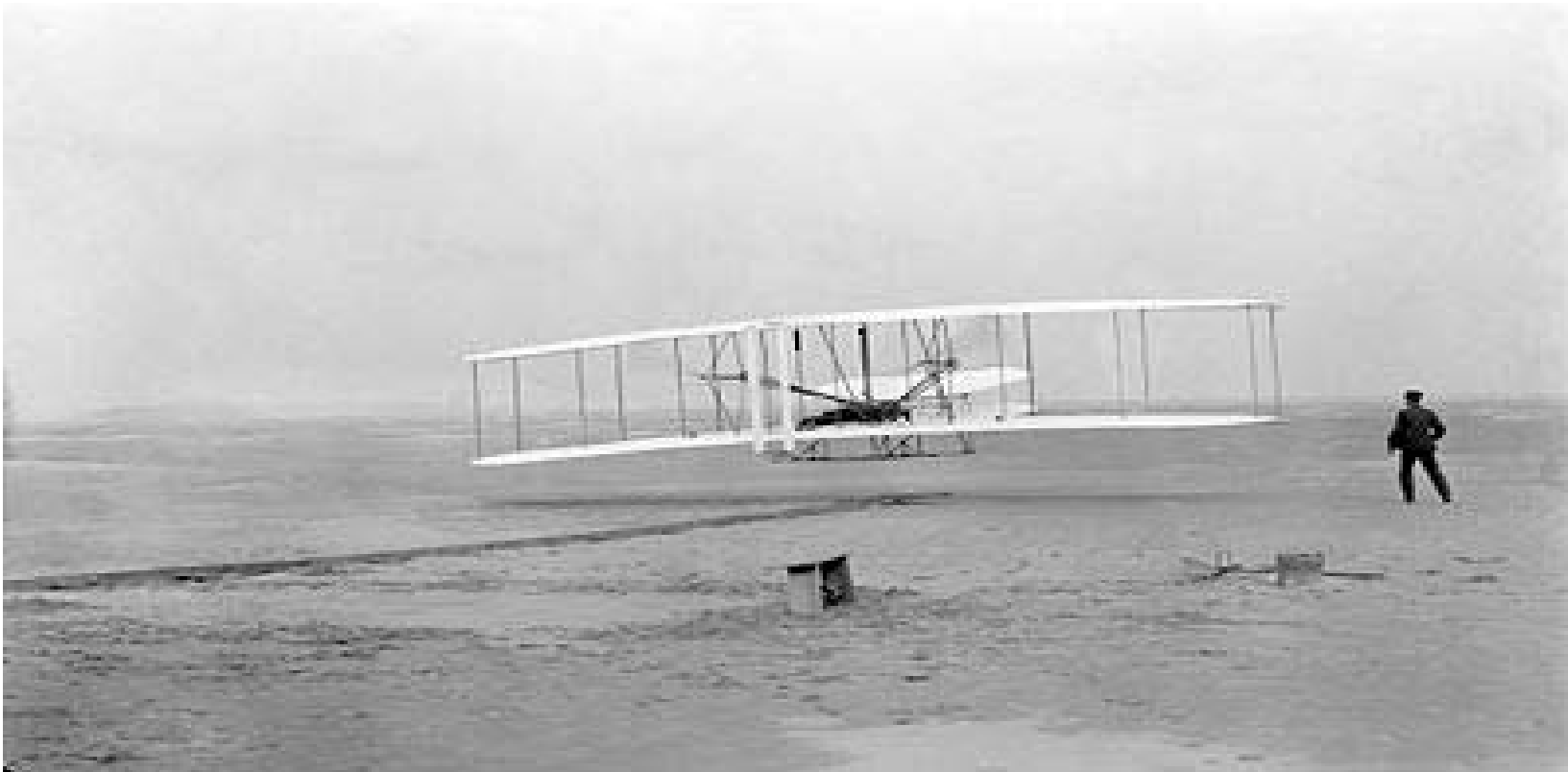
-iPhone: modern and sophisticated cell



PCT publication WO 2006/020305 “*Gestures for Touch-Sensitive Input Devices*”; Apple iPhone, released in January 2007

iPhone comprises not only a telephone function, but also internet connection, video, camera, music, etc. And this did not exist in previous cell phones!

Example of airplanes: Flyer, Wright brothers' first aircraft (December 1903): *59 seconds*



Spirit of Saint-Louis (Airplane of Charles Lindbergh, 1927: 33 hours and 30 minutes from New York to Paris)



Airbus A380 (first take-off in April 2005, 7 hours from Paris to New York)



What is Patent Information?

- ALL TECHNICAL information (inventions/innovations) *described in PATENT documents (bibliographic data, description, drawings and claims)*; Technical information is generally classified as follows :
 - **SECTION A — HUMAN NECESSITIES** (agriculture, foodstuffs, pharmaceuticals, cosmetics, tobacco, etc.)
 - **SECTION B — PERFORMING OPERATIONS; TRANSPORTING** (vehicles, boats, airplanes, roads, houses, machine tools, grinding, polishing, hand tools, hand cutting tools, etc.)
 - **SECTION C — CHEMISTRY; METALLURGY** (treatment of water, waste water, glass, mineral or slag wool, cements, concrete, artificial stone, ceramics, refractories, fertilizers, petroleum, gas, sugar industries, etc.)
 - **SECTION D — TEXTILES; PAPER** (natural or artificial threads, spinning, weaving, ropes, paper-making, treatment of textile, lace-making, knitting, sewing, etc.)
 - **SECTION E — FIXED CONSTRUCTIONS** (building, construction of roads, railways or bridges, hydraulic engineering, foundations, soil-shifting, water supply, locks, keys, window or door, etc.)
 - **SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING**
 - **SECTION G — PHYSICS**
 - **SECTION H — ELECTRICITY**

The Patent System

- Has **two functions**:

- **Protection:** Protection of inventions is territorial (by country or region) and time-limited (max. 20 years)

- **Disclosure/Publication:** Publication of technical information is global (not bound by territory nor time)

- Anyone in Botswana can use patent information published ANYWHERE in the world to promote innovation in his country

Usefulness and Value of Patent Information: Promotion of Innovation

- Patents are often *the unique source of technical information* (according to WIPO and the European Patent Office, more than 80% of *technical knowledge can only be found in patent documents*)
- More than 90 million patent documents have been published today of which 85% (65 million) *are no longer in force* according to EPO
- Nearly *2 million patents are filed every year* and made available publicly *after 18 months*,
- All kind of users in Botswana *find in patent information a tremendous mine gold* in order to *promote innovation in their activities* and, ultimately, *file in their turn patents of their own* (and so goes the promotion of innovation)

Avoid Duplicating R&D Efforts and Spending

- To date, up to 30% of all expenditure in R&D *is wasted every year on trying to invent existing inventions* (the wasted amount is *20 billion euros* according to EPO)
- Patent information as a street banner which aims *to keep all kinds of researchers from walking down a “technical” road that has already been traveled* (researchers will then be kept from “reinventing the wheel”)
- Since most *companies disclose their R&D results in patents*, scrutinizing patents therefore is an efficient way *to avoid duplicating R&D work and spending* (this requires a good strategy on R&D)

Provide Business Opportunities and Business Intelligence

- Since patent information describes products/processes and provides contact details of inventor, company, country of origin and date of filing, it enables SMEs, SMLs and industries *to monitor the innovation strategies of competitors at a very early stage* (in this regard, they can either follow the same “business road” if the business is economically fruitful or take a different road)
- Companies can also *identify new markets*, and therefore locate *suppliers as well as materials needed*
- Companies can also find *new business partners* notably *for licensing, technology transfer, mergers and acquisitions*

Cont'd: Business Opportunities

- One big example for a business opportunity offered by patent information is *the industry of generics in all fields of technology*. In the pharmaceutical field, for instance, *industry of generics* has enabled countries like India and Brazil to supply medicines in the world market, thus contributing to the reduction of the price of goods in the field (to date, India possesses more than 20 000 pharmaceutical laboratories and supply 67% of the generics in the world market. It is obvious that this country reaps benefits thanks to patent information)

Avoid Infringing Others' Patents

- If an invention is protected in Botswana, patent information keeps notably local companies from infringing the owner's rights (patent gives a monopoly to dominate a protected market, and this generates a “life and death” struggle between competitors)
- In many cases, *infringement* had cost companies not just their money but also their very life (the case between Kodak and Polaroid in 1976, and the one between Paragon and Procter & Gamble in 1999 illustrate that R&D can be a two-edged sword for a company *if not well managed*; that is why competitors continually scrutinize each other's patents (especially claims) in order to find *any information which can invalidate patents of their competitors*.

Cont'd: Example of Infringement

- The long-standing lawsuit between Apple and Samsung who have been battling since 2011 before courts *in nine countries* outside the US, including the UK, Australia and Germany
- In 2012, an American judge (in California) ruled that Samsung infringed Apple's patents, and had to pay Apple 1.05 billion US\$ (a year later, the amount was reduced to 930 million US\$ in a damage retrial); Samsung had to modify its patent claims for a new filing, *not to sell its products manufactured with Apple's technology, and withdraw its products which were already in the protected markets*
- Today, the two competitors have settled their patent's lawsuits *outside* the United States (without burying for ever their legal hatchet)

Strengthen/Develop IP Policy

- Each country, like Botswana, has *public policy objectives including developmental and technological objectives to reach*. In this regard, patent information can help the government of Botswana *make an analysis of filing trends in a field, and use this analysis to modify or to improve its national IP strategy* (therefore, *patent landscape reports* produced by WIPO are of great use for that purpose)
- By identifying filing trends, Governments will discover at the same time *famous inventions, leading enterprises and inventors and*, therefore, will find out the geographical distribution of *best products and processes for their technological, economic and social development*

Where can Patent Information be found?

- In national, regional and international databases (we will see that during practical exercises)



Thank you for your attention!

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