

2. TARGETING NEW GROWTH AREAS

2.5. Health-related patents

General health expenditures have risen relentlessly over the past decades in line with the increased costs of medical equipment and the ageing of the population in most OECD countries. Innovations in medical technologies and pharmaceuticals have followed the trend but remain unevenly distributed worldwide.

From 1996 to 2006, the number of patents in medical technologies increased at an average rate of 11% a year, at the same pace as the total number of patents under the Patent Co-operation Treaty (PCT). Patent applications in pharmaceuticals registered growth of 7% over the period. In relative terms, the share of patents in pharmaceuticals decreased in most countries' patent portfolios, from 11% in 1996 to 8% in 2006. In the BRIICS countries (Brazil, Russian Federation, India, Indonesia, China, South Africa) the share of patents relating to pharmaceuticals increased by two percentage points, whereas the share of medical technology patents declined by half from the levels of 1996.

In 2004-06, the United States accounted for almost half of patented inventions in medical technologies, twice as many as the European Union. Israel accounted for 2.7% of patents in medical technologies, twice its share in total patents (1.3%). Additionally, the United States had more than 42% of pharmaceutical patents in the mid-2000s. China and India together accounted for nearly 5% of patents in pharmaceuticals over the period.

Health-related patents

Patents in health-related technologies were identified using the 2008 revision of the technology classification originally developed by the Fraunhofer ISI and the Observatoire des Sciences et des Technologies (OST), in co-operation with the French patent office (INPI), to enable country comparisons (Schmoch, 2008). The research was performed using the codes of 8th edition of the International Patent Classification (IPC).

- **Medical Technology:** A61[B, C, D, F, G, H, J, L, M, N], H05G. "Medical technology is generally associated with high technology. However, a large part of the class A61 refers to less sophisticated products and technologies such as operating tables, massage devices, bandages, etc. These less complex sub-fields represent a large number of patent applications, and the total field is the second largest of the suggested classification with 6.3 per cent of all applications in 2005."
- **Pharmaceuticals:** A61K NOT A61K8/* ("(...) this field refers to an area of application, not a technology. However, the key sub-class A61K is primarily organized by technologies (e.g., medicinal preparations containing inorganic active ingredients...). Cosmetics are explicitly excluded from the field; these represent about 10 per cent of all applications classified in A61K."

For further details on the IPC, 8th edition, www.wipo.int/classifications/ipc/ipc8/?lang=en.

Source

OECD, Patent Database, June 2009, www.oecd.org/sti/ipr-statistics.

Going further

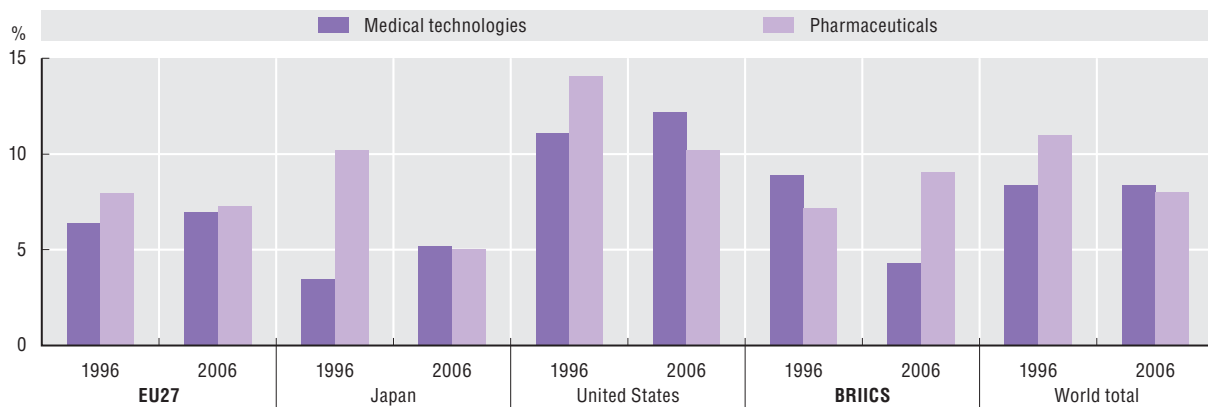
OECD (2009), *OECD Patent Statistics Manual*, OECD, Paris.
Schmoch, U. (2008), "Concept of a Technology Classification for Country Comparisons, Final Report to the World Intellectual Property Organisation (WIPO)", www.wipo.int/export/sites/www/ipstats/en/statistics/patents/pdf/wipo_ipc_technology.pdf.

Figure notes

Data relate to patent applications filed under the PCT, at international phase, designating the European Patent Office (EPO). Patent counts are based on the priority date, the inventor's country of residence and fractional counts.

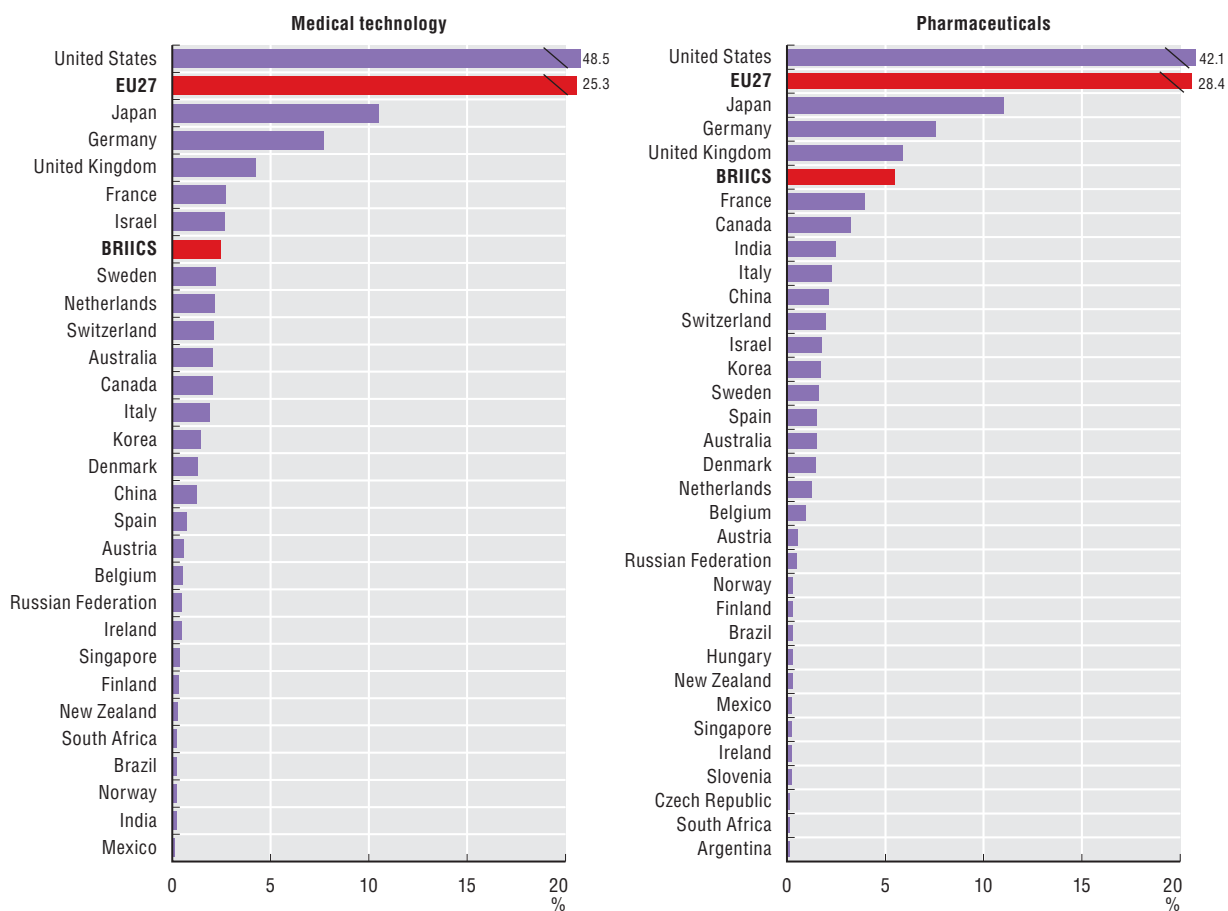
Health-related patents

As a percentage of total PCT patent applications

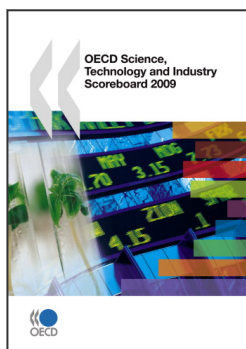


StatLink <http://dx.doi.org/10.1787/743200258672>

Share of countries in health-related patents filed under PCT, 2004-06



StatLink <http://dx.doi.org/10.1787/743274071177>



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