

Indicator (definition)	Number of patents granted by the United States Patent and Trademark Office (USPTO) per million inhabitants.
Eurostat Unit	Education, science and culture statistics
Other Commission DGs	DG RTD
European Statistical System Working Group (WG)	WG on Science, Technology and Innovation (STI) statistics
Date	December 2010

1. Overall assessment of accuracy and comparability (Description of quality grades under the following link: http://circa.europa.eu/Public/irc/dsis/structind/library?l=/general_information/quality_profiles/annex_enpdf/EN_1.0_&a=d)

A
 B
 C
 Indicator to be Developed

Short summary explanation: Data is collected from reliable sources applying high standards with regard to the methodology and ensuring a high degree of comparability.

2. Objective and relevance of the indicator:

This collection provides users with data concerning patents granted by the United States Patent and Trademark Office (USPTO). Data are given at the national level and cover the period from 1977 onwards. Patents are allocated to the country of the inventor, using fractional counting in the case of inventors being resident in different countries.

They also show the country's capacity to exploit and translate its potential into economic output.

The Lisbon European Council (2000) noted that it is necessary to prepare the transition to a knowledge-based economy and society by better policies for the information society and R&D, as well as by stepping up the process of structural reform for competitiveness and innovation and by completing the internal market.

The Lisbon European Council (2000) noted that research activities at national and Union level must be better integrated and coordinated to make them as efficient and innovative as possible, and to ensure that Europe offers attractive prospects to its best brains. The instruments under the Treaty and all other appropriate means, including voluntary arrangements, must be fully exploited to achieve this objective in a flexible, decentralised and non-bureaucratic manner. At the same time, innovation and ideas must be adequately rewarded within the new knowledge-based economy, particularly through patent protection.

The relaunched Lisbon strategy (2005) reinforced the idea of the need of a European patent system.

To date, a consultation is in process in order to set the objectives for the European Union until 2020. In this consultation, patent protection system is also in the discussion board

Restriction of the indicator's relevance and other characteristics which may lead to restrictions in using it in monitoring and reporting

The comparison between the data related to EPO patent applications and USPTO patents granted is difficult as the data compilation is made at different stages of the patenting process due the raw data availability.

PATSTAT is however the unique patent raw data source for the USPTO and EPO related data.

Not all inventions are patented and not all patents have the same value.

The value distribution of patents is skewed as many patents have no industrial application.

Inventions that are protected by other means or inventions, whose value does not warrant the costs of patenting, are not patented.

The propensity to patent differs across countries and industries.

Changes in patent law and regulations result in lower comparability over time.

The inventor's place of residence stated in an application can differ from the country where the invention actually took place (especially in the case of small or poor countries).

Use of the filing or granting date does not reflect a country's innovative performance at that particular moment of time, sometimes the lag from the actual invention time can be many years.

3. Data availability:

(t_1 : earliest reference year available; t_2 : latest reference year available in December 2010)

	Member States	Candidate and Acceding Countries	US and Japan	EEA-EFTA
t ₁	1990: BE, BG, CZ, DK, DE, IE, EL, ES, IT, CY, LU, HU, NL, AT, PL, PT, FI, SE, UK 1991: FR, RO 1992: SI 1993: MT 1994: EE, SK 1995: LT 1997: LV	1990: IS, TR 1992: HR	1990: US, JP	1990: LI, NO, CH
t ₂	2002: MT 2004: BE, BG, CZ, DK, DE, EE, IE, EL, ES, FR, IT, CY, LV, LT, LU, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK	2004: IS, TR, HR	2004: US, JP	2004: LI, NO, CH

Comments: Data not available for MT (1994-1997). Data 2004- estimation only.

4. Overall accuracy

High



USPTO data are compiled on the basis of complete micro-data provided by the EPO, there is no sampling or estimations involved and the data accuracy is high.

From 2007 onwards, for USPTO data PATSTAT (EPO Worldwide Statistical Patent Database) is also the source however as the USPTO data refer to patents granted no PCT applications are involved.

The national distribution of patent applications is assigned according to the inventor's country of residence. If one application has more than one inventor, the application is divided equally among all of them and subsequently among their countries of residence, thus avoiding double counting.

The data on inhabitants refer to the population on the 1st of January each year, and the source is the Eurostat population statistics.

Restricted



(sources, errors, methodology, etc.)

5. Comparability across countries

High



From 2007 onwards, all the patent data produced are based on PATSTAT. All the data is processed using the same process and the same criteria. Therefore the comparability of the data across countries is ensured.

Related to the quality of the EU population statistics, the comparability of the data is high due to the use of the same methodology across countries.

Restricted



6. Comparability over time

High



From 2007 onwards, all the patent data produced are based on PATSTAT. Measures have been taken in order to update following the same procedures the time series and the same criteria.

Related to the quality of the EU population statistics, the comparability of the data is high due to the use of the same methodology over time.

Restricted



7. Development perspective for improving the quality of this indicator (including as far as possible an indication of the burden on Member States and respondents.)

8. Contribution to the coherence of the set/potential to qualify for an integrated policy analysis

Relevant European legislation

Green Paper of 24 June 1997 on the Community patent and the patent system in Europe [COM (97) 314 final - not published in the Official Journal].

Commission Communication of 5 February 1999: Promoting innovation through patents - The follow-up to the Green Paper on the Community patent and the patent system in Europe [COM (1999) 42 final - not published in the Official Journal].

Proposal of 23 December 2003 for a Council Decision conferring jurisdiction on the Court of Justice in disputes relating to the Community patent [COM (2003) 827 final - not published in the Official Journal].

Proposal of 2 December 2003 for a Council Decision establishing the Community Patent Court and concerning appeals before the Court of First Instance [COM (2003) 828 final - not published in the Official Journal].

OECD Patent Statistics Manual, 2009