ANNEX C

Glossary of Relevant Patent and Related Terms

Adoption: The point at which a technology is selected for use by an individual or an organisation.

Applicant: The person or company that applies for the patent and intends to "work" the invention (*i.e.* to manufacture or license the technology). In most countries the inventor(s) does not necessarily have to be the applicant.

Application (or filing) date: The patent application date is the date on which the patent office received the patent application.

Application for a patent: To obtain a patent, an application must be filed with the authorised body (patent office, or application authority) with all the necessary documents and fees. The patent office will conduct an examination to decide whether to grant or reject the application.

Assignee: The person(s) or corporate body to whom all or limited rights under a patent are legally transferred. Assignment of all or limited rights under a patent.

Bibliometrics: Study of the quantitative data of the publication patterns of individual articles, journals, and books in order to analyze trends and make comparisons within a body of literature.

Breadth (or scope): A measure of the extent of the invention covered by a single patent application. For example, one patent application to the EPO would generally include more claims than an application to the JPO.

Citations: They comprise a list of references that are believed to be relevant prior art and which may have contributed to the "narrowing" of the original application. Citations may be made by the examiner or the applicant/inventor.

Claim(s): These define the invention that the applicant wishes to protect. A main claim will define the invention in its broadest form, by including its essential technical features. Further "dependant" claims can then relate to additional features of the invention.

Claimed priority: A priority application that has been duplicated at a foreign patent office at least once. An international patent family with at least two members.

Copyright: The legal right granted to an author, editor or publisher of an article, chapter or complete work. Copyright applies to intellectual property in a variety of artistic fields and attempts to be format-neutral.

Design applications: Designs can be registered for a wide range of products, including computers, telephones, CD-players, textiles, jewellery and watches. Registered designs protect only the appearance of products, for example the look of a computer monitor. Registration of the design does not protect the way in which the product relating to the design works.

Designated countries: Countries in which patent applicants wish to protect their invention. This concept is specific to European patent applications and international patent applications filed under the Patent Co-operation Treaty (PCT).

Diffusion: The extent to which a technology spreads to general use and application in the economy.

Duplicate: A patent that relates to the same invention and shares the same priority as a patent from a different issuing authority. The set of such patents, plus the priority, constitute a "simple" patent family. Also referred to as "equivalents".

ECLA: The European Patent Office's patent classification system. It is based on the IPC Classification System, with greater disaggregation.

Equivalent: See "duplicate".

Esp@cenet: European Patent Office website for searching, displaying and downloading patent documents.

European Patent Convention (EPC): The Convention on the Grant of European Patents (European Patent Convention, EPC) was signed in Munich 1973 and entered into force in 1977. As a result of the EPC, the European Patent Office (EPO) was created to grant European patents.

European Patent Office (EPO): The European Patent Office (a regional patents office) was created by the EPC to grant European patents, based on a centralised examination procedure. By filing a single European patent application in one of the three official languages (English, French and German), it is possible to obtain patent rights in all the EPC member and extension countries by designating the countries in the EPO application. However, translation in local language may be required in order to "validate" the patent in an EPO member country. The EPO is not an institution of the European Union.

European patent: A European patent can be obtained for all the EPC countries by filing a single application at the EPO in one of the three official languages (English, French or German). European patents granted by the EPO have the same legal rights and are subject to the same conditions as national patents (granted by the national patent office). It is important to note that a granted European patent is a "bundle" of national patents, which must be validated at the national patent office for it to be effective in member countries.

Examiner: An employee of a patent office to whom an application is assigned for handling prosecution.

Grant date: The date when the patent office issues a patent to the applicant. On average it takes three years for a patent to be granted at the USPTO and five years at the EPO.

Grant: A temporary right given by the authorised body for a limited time period (normally 20 years) to prevent unauthorised use of the technology outlined in the patent. A patent application does not automatically give the applicant a temporary right against infringement. A patent has to be granted for it to be effective and enforceable against infringement.

Home bias: Propensity for the priority country to be the same as the inventor or applicant country.

Infringement: Unauthorised use of a patented invention.

Innovation: The creation or introduction of something new, especially a new product or a new way of producing something.

Intellectual property rights (IPR): IPR allows people to assert ownership rights on the outcomes of their creativity and innovative activity in the same way that they can own physical property. The four main types of intellectual property rights are: patents, trademarks, design and copyrights.

International patent application: Patent applications filed under the Patent Co-operation Treaty (PCT) are commonly referred to as international patent applications. However, an international patent (PCT) application does not result in the issuance of "international patents", *i.e.* at present, there is no global patent system that is responsible for granting international patents. The decision of whether to grant or reject a patent application filed under the PCT rests with the national or regional (*e.g.* EPO) patent offices.

International Patent Classification (IPC): The International Patent Classification, which is commonly referred to as the IPC, is based on an international multilateral treaty administered by WIPO. The IPC is an internationally recognised patent classification system, which provides a common classification for patents according to technology groups. IPC is periodically revised in order to improve the system and to take account of technical development. The current (eighth) edition of the IPC entered into force on 1 January 2006.

Inventor country: Country of the residence of the inventor, which is frequently used to count patents in order to measure inventive performance.

Inventor: Inventor names are recorded for all patents. These appear in the standard last name-initial(s) format.

Japan Patent Office (JPO): The JPO administers the examination and granting of patent rights in Japan. The JPO is an agency of the Ministry of Economy, Trade and Industry (METI).

Kind Code: The letter, often with a further number, indicating the level of publication of a patent. For example DE-A1 is the German *Offenlegungsschrift* (application laid open for public inspection) while a DE-C1 is the German *Patentschrift* (first publication of the granted patent).

Lapse: The date when a patent is no longer valid in a country or system due to failure to pay renewal (maintenance) fees. Often the patent can be reinstated within a limited period.

Learning by doing: Refers to the improvement in technology that takes place in some industries, early in their history, as they learn by experience, so that average cost falls as accumulated output rises. See infant industry protection, dynamic economies of scale.

Learning curve: Relationship representing either average cost or average product as a function of the accumulated output produced. Usually reflecting learning by doing, the learning curve shows cost falling, or average product rising.

Licence: The means by which the owner of a patent gives permission to another person to carry out an action which, without such permission, would infringe on the patent. A licence can thus allow another person to legitimately manufacture, use or sell an

invention protected by a patent. In return, the patent owner will usually receive royalty payments. A license, which can be exclusive or non-exclusive, does not transfer the ownership of the invention to the licensee.

Novelty: If an application for a patent is to be successful, the invention must be novel (new). The invention must never have been made public in any way, anywhere, before the date on which the application for a patent is filed (or before the priority date).

Obviousness: The concept that the *claims* defining an invention in a patent application must involve an inventive step if, when compared with what is already known (*i.e.prior art*), it would not be obvious to someone skilled in the art.

OECD triadic patent families: The triadic patent families are defined at the OECD as a set of patents taken at the European Patent Office (EPO), the Japan Patent Office (JPO) and the US Patent and Trademark Office (USPTO) that share one or more priorities. Triadic patent families data are consolidated to eliminate double counting of patents filed at different offices (*i.e.* regrouping all the interrelated priorities in EPO, JPO and USPTO patent documents).

Paris Convention: The Paris Convention for the Protection of Industrial Property was established in 1883 and is generally referred to the Paris Convention. The Paris Convention established the system of priority rights. Under the priority rights, applicants have up to 12 months from first filing their patent application (usually in their own country) in which to make further applications in member countries and claim the original priority date.

Patent Co-operation Treaty (PCT): Signed in 1970, the PCT entered into force in 1978. The PCT provides the possibility to seek patent rights in a large number of countries by filing a single international application (PCT application) with a single patent office (receiving office). The PCT procedure consists of two main phases: *a)* an "international phase"; and *b)* a PCT "national/regional phase". PCT applications are administered by the World Intellectual Property Organisation (WIPO).

Patent family: A patent family is a set of individual patents granted by various countries. The patent family is all the equivalent patent applications corresponding to a single invention, covering different geographical regions. Patent family size is a measure of the geographical breadth for which protection of the invention is sought. Several definitions of patent family exist, including "simple" and "extended".

Patent number: A patent number is a unique identifier of a patent. Patent numbers are assigned to each patent document by the patent-issuing authority. The first two letters designate the issuing patent office, *i.e.* EP for EPO patents and the US for USPTO patents

Patent: A patent is an intellectual property right issued by authorised bodies to inventors to make use of, and exploit their inventions for a limited period of time (generally 20 years). The patent holder has the legal authority to exclude others from commercially exploiting the invention (for a limited time period). In return for the ownership rights, the applicant must disclose the invention for which protection is sought. The trade-off between the granting of monopoly rights for a limited period and full disclosure of information is an important aspect of the patenting system.

Patentability: Patentability is the ability of an invention to satisfy the legal requirements for obtaining a patent. The basic conditions of patentability, which an application must meet before a patent is granted, are that the invention must be novel, contain an inventive step (or be non-obvious), be capable of industrial application and not

be in certain excluded fields (*e.g.* scientific theories and mathematical methods are not regarded as inventions and cannot be patented at the EPO).

PATSTAT: The *EPO's Worldwide Patent Statistical Database*.

Prior art: Previously used or published technology that may be referred to in a patent application or examination report: *a)* in a broad sense, technology that is relevant to an invention and was publicly available (*e.g.* described in a publication or offered for sale) at the time an invention was made; and *b)* in a narrow sense, any such technology which would invalidate a patent or limit its scope. The process of prosecuting a patent or interpreting its claims largely consists of identifying relevant prior art and distinguishing the claimed invention from that prior art.

Priority country: Country where the patent is first filed before being (possibly) extended to other countries.

Priority date: The priority date is the first date of filing of a patent application, anywhere in the world (often the applicant's domestic patent office), to protect an invention. The priority date is used to determine the novelty of the invention, which implies that it is an important concept in patent procedures. For statistical purposes, the priority date is the closest date to the date of invention.

Publication lag: In most countries, a patent application is published 18 months after the priority date. For example, all pending EPO and JPO patent applications are published 18 months after the priority date. Prior to a change in rules under the American Inventors Protection Act of 1999, USPTO patent applications were held in confidence until a patent was granted. Patent applications filed at the USPTO on or after 29 November 2000 are to be published 18 months after the priority date, unless requested otherwise by the applicant.

R&D expenditures: The basic measure of R&D expenditures is "intramural expenditures"; *i.e.* all expenditures for R&D performed within a statistical unit or sector of the economy.

R&D: Research and experimental development (R&D) comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

Renewal fees: Once a patent is granted, annual renewal fees are payable to patent offices to keep the patent in force. In the USPTO these payments are referred to as maintenance fees.

Rent: The premium that the owner of a resource receives over and above its *opportunity cost*.

Reverse engineering: The process of learning how a product is made by taking it apart and examining it.

Revocation: Termination of the protection given to a patent on one or more grounds, *e.g.* lack of novelty.

Scientometrics: The quantitative study of the disciplines of science based on published literature and communications. This could include identifying emerging areas of scientific research, examining the development of research over time, or geographic and organisational distributions of research.

Search report: The search report is a list of citations of all published prior art documents which are relevant to the patent application. The search process, conducted by a patent examiner, seeks to identify patent and non-patent documents constituting the relevant prior art to be taken into account in determining whether the invention is novel and includes an inventive step.

Singular: A priority patent application that has never been duplicated abroad (it has not been "claimed" as a priority). A one-member patent family. Also referred to as "singleton".

Transfer of technology: The communication or transmission of a *technology* from one country to another. This may be accomplished in a variety of ways, ranging from deliberate *licensing* to *reverse engineering*.

Term of patent: The maximum number of years that the monopoly rights conferred by the grant of a patent may last.

Trade-Related Aspects of Intellectual Property Rights (TRIPS): Agreement on Trade-Related Aspects of Intellectual Property Rights requires members to comply with certain minimum standards for the protection of IPR. But members may choose to implement laws which provide more extensive protection than is required in the agreement, so long as the additional protection does not contravene the provisions of the agreement. The WTO's TRIPS agreement, negotiated in the 1986-94 Uruguay round, introduced intellectual property rules into the multilateral trading system for the first time.

United States Patent and Trademark Office (USPTO): The USPTO administers the examination and granting of patent rights in the United States. It falls under the jurisdiction of the US Department of Commerce.

Utility model: Also known as "petty patent", these are available in some countries (*e.g.* Japan). This type of patent involves a simpler inventive step than that in a traditional patent and it is valid for a shorter time period.

World Intellectual Property Organisation (WIPO): An intergovernmental organisation responsible for the negotiation and administration of various multilateral treaties dealing with the legal and administrative aspects of intellectual property. In the patent area, the WIPO is notably in charge of administering the Patent Co-operation Treaty (PCT) and the International Patent Classification system (IPC).

Primary sources

OECD and STI/EAS Division (2006), *Glossary of Patent Terminology*, *www.oecd.org/dataoecd/5/39/37569498.pdf*.

Deardoff's, *Glossary of International Economic Terms*, *www-personal.umich.edu/~alandear/glossary*.

OECD (2006), *Economics Glossary: English-French*.

Thomson Scientific, *Glossary of Thomson Scientific Terminology*, *http://scientific.thomson.com/support/patents/patinf/terms*.