IPO POSITION ON WIPO SCP PATENT HARMONIZATION:
A PAPER PREPARED BY IPO
IN SEARCH OF A DOMESTIC CONSENSUS ON PATENT HARMONIZATION
JUNE 5, 2001

Background

The IPO Board adopted the following resolution on June 5, 2001:

> RESOLVED THAT the Intellectual Property Owners Association supports the continuing efforts of the United States Patent and Trademark Office to work with the Standing Committee on the Law of Patents of the World Intellectual Property Organization to determine the feasibility of concluding a new treaty that would harmonize substantive patent law among members of the Paris Convention and,
>
> SPECIFICALLY, IPO has set forth a comprehensive position statement on WIPO Patent Harmonization that it commends to all interested domestic circles as a possible basis for achieving a domestic consensus for proceeding with these efforts.

IPO offers the following position statement as a "work in progress" designed to move forward efforts to reach a domestic consensus on the patent harmonization issues now before WIPO. This position statement was drafted pursuant to two resolutions adopted by the IPO Board of Directors on April 18, 2001.[1]

---

[1] The Intellectual Property Owners Association supports international patent law harmonization efforts where the long-term goals are:

(1) to achieve dramatic improvements in quality of patent examination and sustained reductions in the costs of acquiring multinational patent protection for inventors and industry by (a) fully harmonizing substantive laws regarding patents and patent applications, (b) adopting common procedural practices and requirements regarding patent applications; (c) eliminating unnecessary translation requirements; and (d) reducing or eliminating patent office fees whenever they are in excess of the costs of operating the office;

(2) to eliminate work by national patent offices that, with respect to harmonized substantive laws regarding patentability, represents redundant searching and examining of the same application;

(3) to reduce the overall times of pendency of multinational patent applications, which times are now increasing alarmingly in the major patent offices of the world, including the United States PTO;

(4) to develop cooperative practices and tools relating to standards for examination and examination procedures to assure uniformity in the scope of the patents granted by patent offices implementing harmonized laws on substantive patentability.

Working with other interested circles in the United States, IPO intends that this document be used as a platform for further refinement and, as refined, a basis for discussion with private sector counterparts outside the United States who have an interest in progressing substantive patent law harmonization discussions.

WIPO has moved forward with a broadly supported initiative on patent harmonization. The effort marks a resumption of work towards a treaty on the substantive harmonization of patent laws that that has been quiescent since 1993. WIPO's Standing Committee on the Law of Patents (SCP) launched these new discussions in November 2000, at a meeting of the SCP. A second round of discussion in May 2001 has now been concluded and will be followed with a November 2001 meeting.

At both recent meetings, IPO delegates endorsed the position of the United States Patent and Trademark Office delegation urging WIPO proceed with renewed efforts at substantive harmonization of patent law principles. Moreover, the IPO positions on a host of patent harmonization issues appear now to be largely, if not completely, aligned with those of other U.S. groups who are active in these discussions, including the American Intellectual Property Law Association, the National Association of Manufacturers, and the Biotechnology Industry Association.

Pursuant to decisions taken at these SCP meetings, WIPO's International Bureau has produced multiple sets of draft materials for comment. The first set was dated December 19, 2000. This was followed on February 20, 2001 with the second set of documents, and on April 4, 2001 with a third set. The SCP anticipates another set of

---

(5) to provide consistency and certainty in patent enforcement, including in principles of claim interpretation, and to assure prompt resolution of patent controversies by enforcement authorities.

In support of international patent law harmonization efforts, the Intellectual Property Owners Association specifically supports:

(1) the expansion of cooperative relationships among the major patent offices, including the establishment of joint projects of search and examination by major offices, and, to the extent permitted by harmonization of the laws of substantive patentability, the establishment of systems of full-faith and credit of one office's searches and examinations by the other cooperating offices;

(2) accelerated establishment of comprehensive and universally accepted databases of information that qualifies as prior art and access to and use of such databases by the public and all examining patent offices;

(3) the substantive harmonization of the patent laws of the major patent systems, including specifically, the efforts of the Standing Committee on the Law of Patents of WIPO; and

(4) the further harmonization and unification of regional patent systems, to the extent such efforts are consistent with the efforts of objectives (1) through (3), such as those of the European Commission to establish a single patent that would have effect throughout the European Union.

draft documents will be produced by September 2001 and has requested input on drafting of the next set of treaty documents.

In response to the third set of documents and a United States Patent and Trademark Office Federal Register Notice in March 2001 seeking comment on 17 specific, harmonization-related subjects, IPO tabled a paper responding with summary position statements on each of these topics. The IPO paper was largely aligned with the positions taken by the U.S. delegation at the SCP meeting in May 2001.

IPO has developed additional observations on a number of the issues raised in the latest SCP draft documents and by delegates to the May 2001 SCP meeting. It offers the following paper containing the IPO observations in an effort to advance discussions toward a domestic consensus the many aspects involved in successfully concluding such a treaty.

Principles Guiding Harmonization Efforts

Before embarking upon renewed efforts at harmonization, it is critical that a domestic consensus in the United States be developed on two topics:

(1) What should U.S. patent law look like after implementation of a substantive treaty on patent law harmonization?

(2) What benefits, short term and long term, should be sought and can be expected to emerge from these harmonization efforts?

IPO believes that no domestic consensus has emerged on either of these two topics. A threshold priority, therefore, is for IPO (and other interested circles domestically) is to work to develop such a consensus. For IPO, its starting point has been to reaffirm and underscore its positions from a decade ago *supporting adoption of a domestic "first-to-file" system as part of the overall efforts at international harmonization*.[2] A critical aspect of efforts at consensus building must be directed towards the "independent inventor" community – a group that has historically supported movement to a "first-to-file" system.[3] IPO will work to underscore the importance of a

[2] While the term "first-to-file" is used as a shorthand way of describing the elimination of the use of invention *date* proofs in determining the right to a patent, system that results is still inventor-centric, inventor-dependent, and recognizes that only the invention has the right to a patent, except where the inventor has assigned that right to another. Thus, the system is more properly a "first-*inventor*-to file" system. Indeed, this system provides more security to the "first to invent" than is found under the so-called "first-to-invent" system. Under current U.S. law, a person who is both first to invent and the first inventor to file can still lose the patent to a later inventor who filed later. The "first-inventor-to-file" system prevents this result. Thus, the "first-inventor-to-file" system is the only system that assures the first to invent can always be the inventor awarded the patent – because the first to invent is in the unique position of always being able to file first.

[3] During 1967 Congressional hearings over adoption of first-to-file as a priority rule, independent inventors expressed deep concerns related to *economy* of the then (and now) existing "first-to-

domestic "first-to-file" reform to U.S. patent law especially in light of the U.S. obligations under TRIPs. After January 1, 1996, TRIPs has mandated that the United States accept foreign-origin invention date proofs.[4]

Similarly, it is essential to rebuild a domestic consensus that will allow interested circles in the United States to reaffirm support for making needed and independently desirable reforms to several other aspects of U.S. patent law. These aspects of U.S. patent law represent obstacles to the type of deep and effective international

---

invent" practice—both with respect to the costs and complexity of patent interferences and the need to obtain the *cost benefits of international harmonization*. Small entity inventors expressed specific support for an inexpensive provisional filing scheme as an adjunct to their support for adoption of the first-to-file rule. Although the economics cited in their 1967 testimony must be updated, doing so only makes their arguments today – especially following enactment of the Uruguay Round Agreements Act – even more compelling:

> Our information is that costs average $5000 per applicant per interference, and that one case in four is won by the second-to-file. These are not very good odds. One inventor would have to conduct not four but eight cases for one victory he would not have won under a first-to-file system. At $40,000, this is too dear a victory.
>
> But there is another, more subtle economic factor. This is the cost of world-wide patenting when the rest of the world uses a first-to-file system. If it can be shown that a first-to-file principle in the United States would reduce the cost of typical worldwide coverage—presently on the order of $1000 per country for fees and translations only, or from $5,000 to $30,000 for reasonable worldwide coverage—then we have an additional reason for adopting first-to-file. On this combination of grounds, we endorse a first-to-file rule. We also encourage any other steps taken, not necessarily toward a universal patent, but at least toward a universal patent application, advisory assistance from the Department of Commerce, and other means of reduction in the cost of worldwide patent protection.
>
> Statement of Burke E. Wilford, National Director, the American Society of Inventors, Exhibit D, Hearings before the Subcommittee on Patents, Copyrights and Trademarks of the Committee on the Judiciary, United States Senate, 90th Congress, May 17-18, 1967, p.291.

[4] The changed circumstances from the pre-1996 harmonization efforts cannot be overemphasized. While prior to 1996, U.S. patent provided an advantage for U.S.-origin inventions, the tables have largely been turned. Independent inventors now face the prospect of being the first to invent, the first to file, but still forfeit the right to a patent because of the inability to carry a patent interference fight through to conclusion. The new and unprecedented burden of challenging foreign-origin invention date proofs is highly disadvantageous to "small entity," U.S. origin inventors. In response, IPO believes that, first, U.S. interests must become aligned first to create a consensus for a "first-to-file" system domestically and, second, to prohibit other countries from burdening U.S.-origin inventors using foreign patent systems with an invention date-based, rather than filing date-based, patent system.

harmonization that would best serve U.S. interests. These problematic provisions of domestic of U.S. patent law – like the growing deficiencies of the "first-to-invent" principle – act as impediments to the efficient and effective functioning of the U.S. patent system. Thus, international harmonization could form the impetus for otherwise urgently needed reforms to U.S. patent law.

Exemplary Domestic Reforms That Will Facilitate Optimal Harmonization

IPO, together with the other major private sector commentators on patent harmonization, *i.e.*, AIPLA, NAM and BIO, have already gone on record to support[5] the desirability of making at least the following reforms to the U.S. patent system as part of a move to an internationally harmonized patent system: [6]

(1) the elimination of the separate "best mode" requirement as part of what constitutes an "adequate disclosure" to support a claim;

(2) the removal of the "forfeiture" and "secret prior art" aspects of the "in public use and on sale" bar to obtaining a valid U.S. patent (*i.e.*, retaining as "prior art" under 35 U.S.C. § 102(b) only prior art resulting in a disclosure that is reasonably and effectively accessible to persons of ordinary skill in the art);[7]

(3) ending the prohibition against the filing of an application for patent by the "real party in interest," *i.e.*, the inventor or, where the inventor has assigned, the inventor's assignee,

(4) revising the so-called "Hilmer doctrine" that limits the constructive prior art effect of prior-filed non-U.S. patent applications (*i.e.*, using the "Paris Convention" priority filing date to the extent the priority application discloses the subject matter that is later disclosed in a published patent application or issued patent.);

---

[5] See respective responses of these organizations to the United States Patent and Trademark Office Federal Register Notice, dated March 19, 2001 (66 Fed. Reg. 15409).

[6] The ABA IPL Section submitted comments supportive of international harmonization that were received by the United States Patent and Trademark Office, placed on the Office's website, but later withdrawn. These comments reflected ABA IPL Section past actions on harmonization. The Alliance for American Innovation is another organization whose comments appear on the Office's website and contains views substantially different from those expressed by IPO. This situation underscores the present lack of any domestic consensus on a U.S. position on harmonization.

[7] The IPO position on this issue has been refined from the 1993 position statements related to harmonization where IPO sought to reform the "in public use or on sale" bar by drastically limiting the bar – only a "commercial sale" would have triggered the bar under the proposal as conceived by the IPO. However, IPO's current position produces greater simplicity and certainty and an equivalent result. In general, a completed commercial sale will produce prior art in virtually every circumstance.

(5) replacing the domestic geographic restriction on non-published disclosures as prior art with a new, globalized standard that relies on disclosures reasonably and effectively accessible to persons skilled in the art for any disclosure (*e.g.*, including "oral disclosures") to have the status of prior art.

Exemplary Changes in Foreign Patent Laws That Would Improve Their Effectiveness

IPO is also targeting urgently needed changes in the patent laws governing the major patent systems outside the United States. Dramatic changes to the European Patent Convention, as one example, are essential to improve patent systems throughout Europe and to produce a harmonized patent law. The problematic features of European patent law that IPO would seek to remedy include

(1) the failure to provide for an effective, one-year "grace period,"

(2) the doctrine of absolute "self-collision," *i.e.*, a draconian "double patenting" law that needlessly invalidates claims if not presented in an applicant's first filed patent application in which the claim is adequately supported,

(3) the limitation on published patent applications and issued patents as "prior art" from their filing dates by precluding the use of this art for obviousness considerations (*e.g.*, imposing a strict and highly technical "novelty-only" rule);[8]

(4) the ability to rely on publicly inaccessible, private disclosures (*i.e.*, any non-confidential "divulgations") as prior art,

(5) the requirement to apply a complex and rigid "problem-solution" analysis in assessing non-obviousness instead of a "subject matter as a whole" test,

(6) the requirement for "industrial applicability" as a test of patent-eligible and/or "practically useful" subject matter that can qualify for a patent, and

(7) the need to disclose the invention in terms of "technical features" and demonstrate a "technical effect," with the attendant uncertainty of what, if anything, this requirement excludes from patent-eligibility.

[8] IPO has modified its 1993 position that supported a "novelty-only" senior right rule. This change in IPO's position is based on several factors. First, the accumulated experience in the EPO with this standard has demonstrated that its technical nature and complexity do not warrant continuing to recognize two separate classes of prior art. Further, it has permitted the grant of patents in certain instances with no material differences in scope, producing a questionable public policy outcome. Finally, simplicity of recognizing one and only one form of "prior art" raises none of these concerns, matches an efficiently functioning U.S. rule, and appears to be closer to the consensus position among all interested groups in the United States (*e.g.*, AIPLA and others).

Observations of IPO on the Harmonization Process

With the foregoing principles in mind, IPO has preliminarily answered to the two threshold questions set out above in the following manner:

First, a post-harmonization U.S. patent law should consist of provisions on patentability, patent applications, and patent examination that provide the most simple, certain, prompt, and complete determinations of patentability possible. The United States Patent and Trademark Office should be able to produce high quality determinations of patentability following a brief and focused period of examination that are predictably valid in any later patent infringement litigation and merit full faith and credit internationally.

Second, features of patent law that, in patent litigation, require extensive discovery, *i.e.*, what did the inventors know and when did they know it, what did the inventors do and when did they do it, should be disfavored. In their place should be more objective standards and objectively defined patentability criteria. The result of enforcement of patents granted under a harmonized law should be, therefore, more clearly articulated legal tests, fewer factual inquiries, and a reduced need for extended periods for fact discovery. This should, therefore, lessen the role of juries in U.S. patent cases, *e.g.*, by making the requirements for patent validity issues of law, rather than factual inquiries. These changes should provide particular advantages for U.S.-based inventors from whom discovery has historically been more readily available and effectively used to attack U.S.-origin inventions.

Third, one of the immediate benefits of deep harmonization should be dramatic reductions in cost and redundancy in establishing a global portfolio of patent rights. The touchstone benefit should be the opportunity to use a harmonized set of patent validity requirements to drive full faith and credit in acceptance of substantive examination results from one country to the next.

Finally, where the United States patent system has set the global "gold standard" for articulate and effective principles of patentability, these should be the starting point for a global system and not diluted or diminished to achieve a harmonization for its own sake. In this regard, the U.S. law on "non-obviousness" represents the epitome of such a global "gold standard" and should replace the "inventive step" or "inventive height" notions that depend on an arcane "problem-solution" paradigm to effectuate. Similarly, the U.S. concept of a "useful" invention, *i.e.*, an invention that contributes substantially to the "useful arts," is a far less technical and convoluted standard than "industrial applicability" used elsewhere. In any event, international harmonization efforts should reflect an inquiry into "best practices."

Observations of IPO on Treaty Drafting

To realize these four objectives, IPO urges the SCP to continue its efforts to table at the earliest possible date a comprehensive draft treaty, not a piecemeal draft, in plain

language. In IPO's tentative view, this comprehensive draft should be prepared along the following principles:

1. Highly limit the number of topics to be addressed in harmonization. Limit the harmonization agenda to those topics required to achieve a deep harmonization on patent validity, claim construction of patent claims, application for patent, and patent examination. This limited collection could produce the immediate benefits to innovators through reduction in patent procurement costs.

2. Draft a harmonization treaty *in the form of a prototype patent statute*. WIPO should wholly abandon the old format of the draft 1991 "Patent Law Treaty" ("1991 PLT") in favor of a format that spells out simply, concisely and directly the requirements on adherents to the treaty. If this can be done, the resulting harmonization should be deeper and achieved more rapidly. While existing SCP drafts attempt to adopt such a new format, it should be further refined and focused.

3. Develop in a *single treaty article* the exhaustive and definitive set of requirements for patent validity. This drafting technique should assist refining the understanding of the nature of a truly global set of requirements for patent validity. It is critical that any treaty achieve a single, comprehensive, and definitive statement of all the requirements for the subject matter of a claim in an application for patent (or patent issued on the application) to be fully and unequivocally valid.

4. Limit patent validity requirements to criteria that can be applied globally, can be examined completely, and produce certainty in the patentability determinations. These are key principles that should permit a patent application to be examined once and patented many places.

IPO Substantive Patent Law Treaty Draft

For continuing discussion purposes, IPO is tabling the appended draft treaty chapter setting out the entire substance of a possible new Patent Law Treaty as Appendix A. The eleven articles in this treaty chapter would accomplish the following and represent the scope of a treaty that IPO is prepared to endorse at the present time:

1. Set forth a set of substantive definitions that provide a common and exhaustive definitional framework for making assessments of patentability. Defined terms would include concepts such as "prior art," a "prior art disclosure," "inventor" and "inventive entity," and "applicant for patent." Simple and clear definitions should facilitate setting forth with greater simplicity and clarity the requirements for patent validity.

2. Set forth the exhaustive set of patent validity requirements in a single treaty article. In drafting this article, IPO would propose that the most effective drafting technique would define that all subject matter is validly patentable *unless* one or more of the enumerated patent validity requirements has not been met. Regardless of drafting

technique, the principles of patent validity must be driven in large measure by the ability to produce simplicity and certainty in patent examination.

3. Set forth liberal requirements for who may file an application and a clear definition that the "real party in interest" is deemed to be the formal "applicant for patent."

4. Set out requirements for the application itself, including the claims, with minimalist and formalities-free requirements for establishing a filing date.

5. Set out requirements for claims and claiming in an application for patent and the construction to be given of claims in an application for patent, including claims referencing a "means," and claims formatted in "one part" or "two parts."

6. Provide a comprehensive set of examination principles that adopt a "unity of invention" standard and the right to "continued examination" after a final refusal.

7. Provide additionally the right for both administrative appeals and judicial review of patent office decisions.

8. Provide for the right of third parties to request reexamination of issued patents.

9. Provide for mandatory publication of pending applications for patent.

10. Provide a separate treaty provision on interpretation of patent claims, as distinct from claims in pending applications for patent, to permit consideration to be given to the prosecution history and the cited prior art in determining the scope of protection.

11. Provide for both regulations and examination guidelines, separate from the treaty, to assure greater depth of harmonization in fact.

Additional Comments on Patent Enforcement Issues

While the limited WIPO treaty effort described above does not include provisions on remedies and enforcement of rights, it does touch on patent enforcement issues in the following ways:

1. The treaty should define "claim construction" for both patents and applications for patent. Thus, with claim scope harmonized, TRIPs obligations relating to "adequate and effective protection" for inventors should begin where this treaty leaves off with "claim construction" to be used in defining scope of protection.

2. The treaty should define identical criteria for assessing patent validity and patentability of application claims. While this is not clearly the case under European patent law, and perhaps elsewhere, it provides the simplest patent system and should assist in developing the most complete jurisprudence on a limit set of patentability/validity issues.

3. As discussed more fully above, the treaty should define patentability/validity criteria that place minimal burdens on the inventor and patent applicant. In particular, the actual work done by the inventor/patent applicant should have no special or particular relevance in enforcement proceedings, except where issues such as inventorship-derivation arise.

The latter concept – objective criteria for patentability/validity – is especially important in a globalized patent system to prevent patents in some countries from being more susceptible to attack and invalidation because of differences in the availability of discovery or relative inaccessibility of the inventor or the applicant. Further, it removes many of the anomalies from existing U.S. law that work against U.S.-origin inventions and effectively favor foreign-origin inventors and applicants.[9]

Conclusion

The tremendous complexity of any patent harmonization effort and the enormity of the burden to make very significant changes to the substantive patent laws throughout the world are daunting challenges. The sole justification for these prodigious efforts will lie in the ability to produce historic economies in patenting – by eliminating redundancies, superfluous activities, and unnecessary complexity.

In these efforts, IPO is mindful of the need to establish a domestic consensus that assures that the overall effort provides benefits for U.S.-origin inventions and U.S. inventors. In this regard, IPO has staked out a position that it will not support any treaty provision that does not meet the test of representing a desirable reform to U.S. patent law, with or without harmonization. It assumes that others outside the United States will do likewise – meaning a harmonized system of "best practices" must be identified if these efforts are to succeed. It is in this spirit – and with these challenges – that IPO offers this submission.

---

[9] The two most notable anomalies are produced by the "in public use or on sale" bar and the "best mode" requirement. For foreign-origin inventors and applicants, the secret commercial use of an invention – even if substantial and over several years – does not trigger either the "public use" or "on sale" bar under current U.S. law. The foreign applicant is free to seek and obtain a U.S. patent because the use or sale was outside the United States. Even if the United States were to "globalize" this bar, it would still in many cases be easier to invalidate a U.S.-origin patent than a foreign-origin patent because of differences in the availability of discovery. The same is true of the "best mode" requirement because it normally requires some evidence of what modes the inventor contemplated, if any, and when that contemplation took place. Without access to the inventor, proof of invalidity on this ground is far less likely. "Invention date" proofs – useful in invention priority contests and to avoid prior art – now produce exactly the same advantage for the foreign-origin inventor vis-à-vis the U.S.-origin inventor. Because of language, cost, and discovery issues, it can be more difficult to rebut evidence of an early foreign invention date. The treaty, by removing each of these elements from the patent law, should level the playing field that U.S. law now tilts in favor of foreign-origin inventors.

Appendix A: Substantive Patent Law Treaty (SPLT) Proposed Draft Treaty "Part I" With Provisions Formatted Analogously To A Prototype Harmonized Patent Statute.

Appendix B: Notes on Substantive Provisions of Law (Articles 1 and 2).

APPENDIX A
SUBSTANTIVE PATENT LAW TREATY (SPLT)
PROPOSED DRAFT TREATY "PART I" WITH PROVISIONS FORMATTED ANALOGOUSLY TO A PROTOTYPE HARMONIZED PATENT STATUTE

PRO-FORMA 35 U.S.C. § 51-60:
A PROTOTYPE HARMONIZED PATENT STATUTE BASED ON PROPOSED DRAFT TREATY

Part I: Substantive Provisions Relating to National Patent Law.

Article 1 – Terms required to be defined under national law.
Article 2 – Required provisions of national law relating to validity of a claim.
Article 3 – Required provisions of national law relating to the applicant for patent.
Article 4 – Required provisions of national law relating to the application for patent.
Article 5 – Required provisions of national law relating to claims in an application for patent.
Article 6 – Required provisions of national law related to examination of an application for patent.
Article 7 – Required provisions of national law relating to the right of appeal.
Article 8. – Required provisions of national law relating to reexamination.
Article 9 – Required provisions of national law relating to claims in a patent.
Article 10 – Required provisions of national law relating to publication of applications.
Article 11 – Relationship of treaty articles to regulations, examination guidelines, and regional patent systems.

Article 1 – Terms required to be defined under national law and definitions required to be accorded.

(1) [REQUIRED DEFINITIONS.]–The national law of each Contracting Party shall contain at least the following defined terms and these terms shall be defined in the manner as set forth below:

(a) "Invention" means any invention or discovery, regardless of whether or not validly patentable as a matter of law.

(b) "Application for patent" means an application filed with a patent office requesting the grant of a patent with respect to an invention. The term "patent office" shall mean any authority authorized by a Contracting Party to issue patents having effect in the territory of the Contracting Party.

(c) "Inventor" of subject matter means a person who contributed to the conception of the subject matter. "Conception" for subject matter means the completed mental development of the subject matter as a whole as it is thereafter capable of being carried out in practice. "Sole inventor" of subject matter means an inventor who conceived the subject matter, without any contribution to the conception from others. "Joint inventor" of subject matter means one of two or more inventors who collectively conceived the subject matter, even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution to the conception, and (3) each did not make a contribution to the conception of the subject matter of every claim made in the application for patent.

(d) “Inventive entity” with respect to subject matter means its sole inventor, if a sole invention, or the joint inventors, if an invention made jointly.

(g) “Applicant” for a patent or an application for patent means the person or entity that is the real party in interest with respect to the ownership of the application, regardless of the person or entity who filed the application.

(h) “Patent” means a patent issued on an application for patent by a patent office.

(i) “Specification” of a patent or an application for patent means the part of the patent or the application for patent that contains the disclosure of an invention.

(j) “Claim” means the part of the specification that contains the subject matter for which the patent has been granted or for which the grant of a patent is requested.

(k) “Filing date” for a patent or an application for patent means the date on which the filing of the application for patent is deemed to have been made by the patent office where the filing of the application was made.

(l) “Priority date” for a claim means the filing date of the patent or patent application for patent in which the claim is present or, if the patent or the application for patent is entitled to the right of priority, the filing date of the earliest filed such priority application in which the subject matter of the claim is adequately disclosed based on the Article 2(1)(b) requirements.

(o) “Prior art disclosure” with respect to a claim means a single public prior art disclosure or a single prior patent filing disclosure. “Public prior art disclosure” with respect to a claim means a disclosure that is made reasonably and effectively accessible to persons skilled in the art (1) more than one year prior to the priority date of the claim or (2) if the disclosure not made directly or indirectly by or on behalf of the inventive entity of the claim, at any time before the priority date of the claim. “Prior patent filing disclosure” with respect to a claim of an applicant means subject matter disclosed in a patent issued by a Contracting Party or application for patent published by a Contracting Party where such disclosure in the issued patent or published application was filed (1) more than more than eighteen months prior to the priority date of the claim or (2) if the issued patent or published application was not filed by the applicant, at any time before the priority date of the claim; provided that, to the extent the subject matter was disclosed in a priority application for which the issued patent or published application was entitled to a right of priority, it shall be deemed that such disclosure was filed on such priority date for the issued patent or published patent application.

(p) “Prior art” with respect to a claim in an application for patent means any prior art disclosure that is pertinent to the subject matter of the claim or any combination of such pertinent prior art disclosures where a person of ordinary skill in the art would have been motivated to combine such disclosures.

(2) [OTHER DEFINITIONS.]–The patent law of a Contracting Party may contain other defined terms that are not inconsistent with the definitions in this Article.

PART II – PATENTABILITY OF INVENTIONS AND GRANT OF PATENTS

CHAPTER 5 – Internationally Harmonized Provisions Related to Patentability, Patent Applications, Patent Procurement, and Patent Construction

§51 – Definitions.

(1) [HARMONIZED DEFINITIONS.]–As used in this title, the following terms shall have the definitions set out in this subsection:

(a) "Invention" means any invention or discovery, regardless of whether or not validly patentable as a matter of law.

(b) "Application for patent" means an application filed with the Office requesting the grant of a patent with respect to an invention.

(c) "Inventor" of subject matter means a person who contributed to the conception of the subject matter. "Conception" for subject matter means the completed mental development of the subject matter as a whole as it is thereafter capable of being carried out in practice. "Sole inventor" of subject matter means an inventor who conceived the subject matter, without any contribution to the conception from others. "Joint inventor" of subject matter means one of two or more inventors who collectively conceived the subject matter, even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution to the conception, and (3) each did not make a contribution to the conception of the subject matter of every claim made in the application for patent.

(d) "Inventive entity" with respect to subject matter means its sole inventor, if a sole invention, or the joint inventors, if an invention made jointly.

(e) "Applicant" for a patent or an application for patent means the person or entity that is the real party in interest with respect to the ownership of the application, regardless of the person or entity who filed the application.

(f) "Patent" means a patent issued on an application for patent.

(g) "Specification" of a patent or an application for patent means the part of the patent or the application for patent that contains the disclosure of an invention.

(h) "Claim" means the part of the specification that contains the subject matter for which the patent has been granted or for which the grant of a patent is requested.

(i) "Filing date" for a patent or an application for patent means the date on which the filing of the application for patent is deemed to have been made by the Office.

(j) "Priority date" for a claim means the filing date of the patent or patent application for patent in which the claim is present or, if the patent or the application for patent is entitled to the right of priority, the filing date of the earliest filed such priority application in which the subject matter of the claim is adequately disclosed based on the Article 2(1)(b) requirements.

(k) "Prior art disclosure" with respect to a claim means a single public prior art disclosure or a single prior patent filing disclosure. "Public prior art disclosure" with respect to a claim means a disclosure that is made reasonably and effectively accessible to persons skilled in the art (1) more than one year prior to the priority date of the claim or (2) if the disclosure not made directly or indirectly by or on behalf of the inventive entity of the claim, at any time before the priority date of the claim. "Prior patent filing disclosure" with respect to a claim of an applicant means subject matter disclosed in a patent or a published application for patent where such disclosure in the issued patent or published application was filed (1) more than more than eighteen months prior to the priority date of the claim or (2) if the issued patent or published application was not filed by the applicant, at any time before the priority date of the claim; provided that, to the extent the subject matter was disclosed in a priority application for which the issued patent or published application was entitled to a right of priority, it shall be deemed that such disclosure was filed on such priority date for the issued patent or published patent application.

(l) "Prior art" with respect to a claim in an application for patent means any prior art disclosure that is pertinent to the subject matter of the claim or any combination of such pertinent prior art disclosures where a person of ordinary skill in the art would have been motivated to combine such disclosures.

(2) [OTHER DEFINITIONS.]– As used in this title, the following terms shall have the definitions set out in this subsection:

(a) "Office" means United States Patent and Trademark Office.

Article 2 – Required provisions of national law relating to validity of a claim.

(1) [REQUIREMENTS FOR VALIDITY.]–The subject matter of a claim in an patent or an application for patent shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless any one or more of the following are established–

(a) [INDEFINITENESS]–the claim fails to identify with reasonable clarity and specificity the subject matter being claimed;

(b) [INADEQUATE DISCLOSURE]–the application does not contain an adequate disclosure of the claimed subject matter because the application fails to–

(1) [LACK OF DESCRIPTION]–provide a description of the subject matter or

(2) [LACK OF ENABLEMENT]–enable persons with ordinary skill in art to make and use the subject matter without engaging in undue experimentation;

(c) [INCOMPLETE NAMING OF INVENTORS]–the application or patent fails to name, or has not been corrected to name, each of the inventors of the subject matter;

(d) [LACK OF NOVELTY]–an identical and adequate disclosure of such subject matter is set out in a single prior art disclosure;

(e) [OBVIOUSNESS]–the subject matter as a whole would have been obvious to an ordinarily skilled person in the art to which the subject matter pertains, based on the differences between such subject matter and the prior art, provided that non-obviousness shall not be negatived by the manner in which the invention was made;

(f) [LACK OF USEFULNESS]–the subject matter is not practically useful for a substantial purpose or effect available as of the filing date;

(g) [INELIGIBLE SUBJECT MATTER]–the claim fails to characterize the claimed subject matter as a tangible product, a method, or an improvement of such a product or method, and

(h) [DOUBLE PATENTING]–(i) another claim with identical limitations has previously issued to the applicant in another patent having effect in the same jurisdiction or (ii) the subject matter is directed to an obvious variation of patented subject matter of another claim issued to the applicant in another patent, not a prior art disclosure with respect to the claim, having (A) effect in the same jurisdiction, (B) an earlier priority date than the priority date of the claim, and (C) an earlier expiration date than the expiration date of a patent issued on the claim.

(2) [EXCLUSIVE REQUIREMENTS.]–Each Contracting Party shall impose the requirements of law set forth in this article, but only such requirements, in determining whether the subject matter of a claim in a patent is or in an application for patent is validly patentable.

§52 – Validity requirements.

(1) [REQUIREMENTS FOR VALIDITY.]–The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of law, unless any one or more of the following are established –

(a) [INDEFINITENESS]–the claim fails to identify with reasonable clarity and specificity the subject matter being claimed;

(b) [INADEQUATE DISCLOSURE]–the application does not contain an adequate disclosure of the claimed subject matter because the application fails to–

(1) LACK OF DESCRIPTION]–provide a description of the subject matter or

(2) [LACK OF ENABLEMENT]–enable persons with ordinary skill in art to make and use the subject matter without engaging in undue experimentation;

(c) [INCOMPLETE NAMING OF INVENTORS]–the application or patent fails to name, or has not been corrected to name, each of the inventors of the subject matter as of the priority date;

(d) [LACK OF NOVELTY]–an identical and adequate disclosure of such subject matter is set out in a single prior art disclosure;

(e) [OBVIOUSNESS]–the subject matter as a whole would have been obvious to an ordinarily skilled person in the art to which the subject matter pertains, based on the differences between such subject matter and the prior art, provided that non-obviousness shall not be negatived by the manner in which the invention was made;

(f) [LACK OF USEFULNESS]–the subject matter is not practically useful for a substantial purpose or effect available as of the filing date;

(g) [INELIGIBLE SUBJECT MATTER]–the claim fails to characterize the claimed subject matter as a tangible product or method, or an improvement of a such a product or method; and

(h) [DOUBLE PATENTING]–(i) another claim with identical limitations has previously issued to the applicant in another patent or (ii) the subject matter is directed to an obvious variation of patented subject matter of another claim issued to the applicant in another patent, not a prior art disclosure with respect to the claim, having (A) an earlier priority date than the priority date of the claim and (B) an earlier expiration date than the expiration date of a patent issued on the claim.

(2) [EXCLUSIVE REQUIREMENTS.]–The requirements set forth in this section and only such requirements shall be used in determining whether the subject matter of a claim in a patent or in an application for patent is validly patentable.

Article 3 – Required provisions of national law relating to the applicant for patent.

(1) [PERSONS PERMITTED TO FILE APPLICATIONS.]–The national law of each Contracting Party shall provide that for the purposes of establishing the filing date of an application for patent, the application may be filed by at least the following persons:

(a) one or more of the inventors of subject matter claimed or otherwise identified as an invention disclosed in the application;

(b) an assignee of one or more of the inventors;

(c) an authorized legal representative of an inventor or an assignee; or

(d) any two or more of such persons jointly.

(2) [NOTIFICATION OF INVENTORS.]–The national law of each Contracting Party shall provide that, where the application is filed by persons representing less than the entire right, title and interest of the complete inventive entity, the patent office shall provide notice to any inventor whose interests in the application are not superseded by rights assigned to the person or persons filing the application. The national law of each Contracting Party shall additionally provide that, where any inventor's interests in the

application are not superseded by rights assigned to another, the grant of the patent shall include the grant of joint ownership rights to such inventor.

(3) [REAL PARTY IN INTEREST AS PATENT APPLICANT.]–The national law of each Contracting Party shall provide that –

(a) the real party or real parties in interest with respect to the ownership of the application shall be identified in an application for patent, which shall be the inventive entity absent an assignment of rights;

(b) the real party or parties in interest shall be deemed the applicant for patent; and

(c) the patent office shall prescribe regulations setting out the manner in which the real party in interest shall be identified in the application and the manner in which notification shall be made of any assignment of rights affecting the real parties in interest; provided further, that the patent office may require authorization from any party in interest who did not join in the filing of the application for patent in order to maintain the application in force and effect.

§53 –Applicant for patent.

(1) [PERSONS PERMITTED TO FILE APPLICATIONS.]–For the purposes of establishing the filing date of an application for patent, the application may be filed by at least the following persons:

(a) one or more of the inventors of subject matter claimed or otherwise identified as an invention disclosed in the application;

(b) an assignee of one or more of the inventors;

(c) an authorized legal representative of an inventor or an assignee; or

(d) any two or more of such persons jointly.

(2) [NOTIFICATION OF INVENTORS.]–Where the application is filed by persons representing less than the entire right, title and interest of the complete inventive entity, the patent office shall provide notice to any inventor whose interests in the application are not superseded by rights assigned to the person or persons filing the application. Where any inventor's interests in the application are not superseded by rights assigned to another, the grant of the patent shall include the grant of joint ownership rights to such inventor.

(3) [REAL PARTY IN INTEREST AS PATENT APPLICANT.]–The real party or real parties in interest with respect to the ownership of the application shall be identified in an application for patent, which shall be the inventive entity absent an assignment of rights; the real party or parties in interest shall be deemed the applicant for patent; and the Director shall prescribe regulations setting out the manner in which the real party in interest shall be identified in the application and the manner in which notification shall be made of any assignment of rights affecting the real parties in interest. The Director may require authorization from any party in interest who did not join in the filing of the application for patent in order to maintain the application in force and effect.

Article 4 – Required provisions of national law relating to the application for patent.

(1) [COMPLETE APPLICATION FOR PATENT.]–The national law of each Contracting Party shall provide that a complete application for patent shall consist of, and only of, the following parts –

(a) an identification of the applicant and, if different, the inventors;

(b) a specification that shall include one or more claims; and

(c) a request for the grant of a patent, together with such reasonable fees that the patent office may prescribe, if any, in connection with the filing of the application for patent.

(2) [DRAWINGS PERMITTED.]–The national law of each Contracting Party shall provide that the specification as filed may contain one or more drawings and the submission of a drawing may be made or required to be made after filing, provided that a drawing submitted after the filing date may not be used to (1) render adequate an otherwise inadequate disclosure, or (2) modify the construction to be afforded a claim.

(3) [REQUIREMENTS FOR FILING DATE.]–The national law of each Contracting Party shall provide that a filing date will be accorded whenever at least some description of an invention is filed in a manner where a person entitled to file an application with respect to the invention can be identified in connection with the filing.

(4) [NEW MATTER PROHIBITION.]–The national law of each Contracting Party shall provide that no new matter shall be introduced into any application for patent after the filing is deemed to have been made.

(5) [PRIORITY APPLICATIONS.]–The national law of each Contracting Party shall provide that a regularly filed application for patent may be designated as a priority application that, absent a request to change the designation to a non-priority application, shall not be examined for patentability, but may serve as the basis for a claim for the benefit of the filing date of the priority application as the priority date for a claim in a later-filed application.

§54 –Application for patent.

(1) [COMPLETE APPLICATION FOR PATENT.]–A complete application for patent shall consist of, and only of, the following parts –

(d) an identification of the applicant and, if different, the inventors;

(e) a specification that shall include one or more claims; and

(f) a request for the grant of a patent, together with such fees that the Director may prescribe in connection with the filing of the application for patent.

(2) [DRAWINGS PERMITTED.]–The specification as filed may contain one or more drawings and the submission of a drawing may be made or required to be made after filing, provided that a drawing submitted after the filing date may not be used to (1) render adequate an otherwise inadequate disclosure, or (2) modify the construction to be afforded a claim.

(3) [REQUIREMENTS FOR FILING DATE.]–A filing date will be accorded whenever at least some description of an invention is filed in a manner where a person entitled to file an application with respect to the invention can be identified in connection with the filing.

(4) [NEW MATTER PROHIBITION.]–No new matter shall be introduced into any application for patent after the filing is deemed to have been made.

(5) [PRIORITY APPLICATIONS.]–A regularly filed application for patent may be designated as a priority application that, absent a request to change the designation to a non-priority application, shall not be examined for patentability, but may serve as the basis for a claim for the benefit of the filing date of the priority application as the priority date for a claim in a later-filed application.

Article 5 – Required provisions of national law relating to claims in an application for patent.

(1) [CLAIM CONSTRUCTION.]–The national law of each Contracting Party shall provide that each claim in an application for patent shall be construed based on the disclosure of the claimed subject matter provided in the specification, as it would be understood as of the filing date by a person of ordinary skill in the art to which the claimed subject matter relates, as follows:

(a) each separate element or limitation contained in the claim shall be identified,

(b) the literal scope of each element or limitation shall be determined, and

(c) the scope of the claimed subject matter shall consist of the subject matter defined by all elements or limitations so identified and determined.

(2) [FORMAT FOR CLAIMS.]– The national patent law of each Contracting Party shall provide that a claim may be written in either of the following formats:

(a) as a single statement containing limitations that define the subject matter for which protection is sought, which may be preceded by a preamble, which may contain additional limitations, and a transitional phrase, such as "comprising," "consisting of," or "consisting essentially of," depending upon whether the subsequent limitations respectively define the claimed subject matter non-exclusively, exclusively, or exclusively except for additional subject matter that does not affect the basic and novel characteristics of the subject matter otherwise defined;

(b) with two distinct parts, separated by the transitional phrase such as "characterized in that," "characterized by," "wherein the improvement comprises," or other transitional language to the same effect, the first part of which (the "background part") shall provide those limitations of the claimed subject matter which are necessary to define the claimed subject matter and, taken together in combination, define subject matter that the applicant regards to be described in the prior art, and the second part of which ("the characterizing part") shall provide additional limitations that, taken together with the limitations of the first part, define the subject matter claimed.

(3) [FORM OF CLAIMS.]–The national law of each Contracting Party shall provide that –

(a) a claim may be set out in independent or, if the nature of the case admits, in dependent or multiple dependent form, so long as at least one independent claim is provided;
(b) a dependent claim shall contain a reference from a claim previously set forth and specify a further limitation of the subject matter claimed;
(c) a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers; and
(d) a multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

(4) [CLAIMS REFERENCING A MEANS.]–The national law of each Contracting Party shall provide that a limitation or element in a claim setting out a combination of elements may be expressed only as a means or step for performing a specified function, and will be so construed unless the applicant fails to use the nomenclature "means for" or "step for" in the claim in reference to the limitation or element; provided further, that national law of each Contracting Party shall provide that the limitation or element so expressed as a means or step shall be construed to cover only the corresponding structure, material, or acts described in the specification and any structures, materials, or acts that, as of the priority date, would be deemed equivalent structures, materials, or acts by an ordinarily skilled person in the art to which the claimed subject matter pertains.

§55 – Claims in an application for patent.

(1) [CLAIM CONSTRUCTION.]–Each claim in an application for patent shall be construed based on the disclosure of the claimed subject matter provided in the specification, as it would be understood as of the filing date by a person of ordinary skill in the art to which the claimed subject matter relates, as follows:

(a) each separate element or limitation contained in the claim shall be identified,
(b) the literal scope of each element or limitation shall be determined, and
(c) the scope of the claimed subject matter shall consist of the subject matter defined by all elements or limitations so identified and determined.

(2) [FORMAT FOR CLAIMS.]– A claim may be written in either of the following formats:

(c) as a single statement containing limitations that define the subject matter for which protection is sought, which may be preceded by a preamble, which may contain additional limitations, and a transitional phrase, such as "comprising," "consisting of," or "consisting essentially of," depending upon whether the subsequent limitations respectively define the claimed subject matter non-exclusively, exclusively, or exclusively except for additional subject matter that does not affect the basic and novel characteristics of the subject matter otherwise defined;
(d) with two distinct parts, separated by the transitional phrase such as "characterized in that," "characterized by," "wherein the improvement comprises," or other transitional language to the same effect, the first part of which (the "background part") shall provide those limitations of the claimed subject matter which are necessary to define the claimed subject matter and, taken together in combination, define subject matter that the applicant regards to be described in the prior art, and the second part of which ("the characterizing part") shall provide additional limitations that, taken together with the limitations of the first part, define the subject matter claimed.

(3) [FORM OF CLAIMS.]–A claim may be set out in independent or, if the nature of the case admits, in dependent or multiple dependent form, so long as at least one independent claim is provided. A dependent claim shall contain a reference from a claim previously set forth and specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

(4) [CLAIMS REFERENCING A MEANS.]–A limitation or element in a claim setting out a combination of elements may be expressed only as a means or step for performing a specified function, and will be so construed unless the applicant fails to use the nomenclature "means for" or "step for" in the claim in reference to the limitation or element; provided further, that the limitation or element so expressed as a means or step shall be construed to cover only the corresponding structure, material, or acts described in the specification and any structures, materials, or acts that, as of the priority date of the claim, would be deemed equivalent structures, materials, or acts by an ordinarily skilled person in the art to which the claimed subject matter pertains.

Article 6 – Required provisions of national law related to examination of an application for patent for Contracting Parties requiring pre-grant examination for patentability.

(1) [EXAMINATION FOR UNITY OF INVENTION.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that, once an application for patent is accepted as complete, the patent office shall cause an examination to be made of with respect to unity of invention of the claims that are then pending in the application. The national law of each such Contracting Party shall further provide that, if the patent office determines that lack of unity of invention is present, the patent office may require –

(a) the election of a single, unitary invention to which the claims shall be thereafter restricted, subject to the right of the applicant to file one or more divisional applications, and

(b) a further election, at the option of the applicant, of such additional separate and non-unitary invention on which examination is concurrently desired in the application;

provided further, that the national law of each such Contracting Party shall provide that–

(i) if an election to examine additional separate and non-unitary inventions is made, the applicant may be required to make payment with such election of an additional examination fee for each such additional separate and non-unitary invention that is elected, and

(ii) unity of invention shall not a requirement for validity of a claim and lack of unity shall not be a basis for invalidating a claim.

(2) [EXAMINATION FOR VALIDITY.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that, following the examination for unity of invention, an examination shall be made to determine whether the claims qualifying for examination under Article 5(1) meet the requirements of law for patentability set out in Article 2.

(3) [NOTIFICATION TO APPLICANTS.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that, (a) whenever, upon examination, any claim for a patent is not deemed to meet each of the requirements for patentability or the application is not deemed to be in conformance with any requirement permitted to be imposed under this treaty, the patent office shall notify the applicant thereof, stating the reasons for such conclusions and any requirements with respect to the application, together with such additional information and references as may be appropriate and, (b) if after receiving such notice, the applicant requests reconsideration, with or without amendment of the application, the application shall be reexamined.

(4) [FINAL REFUSAL OF APPLICATION.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that an application for a patent, whose claims have been twice refused on substantially the same grounds, may be deemed finally refused and, if so deemed, the patent office shall not be required to act further on the merits of the application, except as provided in Articles 5(5) and 5(6).

(5) [RIGHT TO APPEAL.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that an applicant for a patent, whose application has been finally refused or any of whose claims have been twice refused, may appeal from the decision to an administrative body within the patent office duly constituted to hear such appeals.

(6) [RIGHT TO CONTINUED PROSECUTION.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that continued examination of applications for patent shall be made available to the applicant, upon

request of the applicant and the payment of any required fee therefor, once the application has been finally refused or has been allowed.

(7) [ABANDONMENT FOR FAILURE TO TAKE ACTION.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that, upon failure of the applicant to prosecute the application within a reasonable time period after any action therein, notice of which has been provided to the applicant, the application shall be regarded as abandoned, unless it be shown to the satisfaction of the patent office that such delay was unintentional. Except for a requirement to make an election under Article 6(1), the national law of each Contracting Party shall provide that the period for taking action in response to a communication from the patent office shall in no case be less than three months from the date of the communication.

(8) [RIGHT TO AMEND OR CORRECT UNLESS NEW MATTER.]–The national law of each Contracting Party shall permit amendments to the specification or claims to be made as a matter of right at any time prior to the grant of the patent, unless the application has been finally refused or notice has been given to the applicant that all the pending claims have been allowed. In these circumstances, the national law shall permit amendments as a matter of right only upon the applicant's request for continued examination. The national law of each Contracting Party shall provide that no amendment to the specification may introduce new subject matter beyond that contained in the specification at the filing date of the application for patent, except that the correction of a clear mistake or manifest clerical error that would be understood as such by a person of ordinary skill in the art shall not be deemed new matter.

§56 – Examination of the application for patent.

(1) [EXAMINATION FOR UNITY OF INVENTION.]–Once an application for patent is accepted as complete, the Office shall cause an examination to be made of with respect to unity of invention of the claims that are then pending in the application. If the Office determines that lack of unity of invention is present, the Office may require –

(a) the election of a single, unitary invention to which the claims shall be thereafter restricted subject to the right of the applicant to file one or more divisional applications, and

(b) a further election, at the option of the applicant, of such additional separate and non-unitary invention on which examination is concurrently desired in the application;

provided further, that–

(i) if an election to examine additional separate and non-unitary inventions is made, the applicant may be required to make payment with such election of an additional examination fee for each such additional separate and non-unitary invention that is elected, and

(ii) unity of invention shall not a requirement for validity of a claim and lack of unity shall not be a basis for invalidating a claim.

(2) [EXAMINATION FOR PATENT VALIDITY.]–Following the examination for unity of invention, an examination shall be made to determine whether the claims qualifying for examination under subsection (1) meet the requirements of law for patentability set out in section 52.

(3) [NOTIFICATION TO APPLICANTS.]–Whenever, upon examination, any claim for a patent is not deemed to meet each of the requirements for patentability or the application is not deemed to be in conformance with any requirement permitted to be imposed under this treaty, the Office shall notify the applicant thereof, stating the reasons for such conclusions and any requirements with respect to the application, together with such additional information and references as may be appropriate and, (b) if after receiving such notice, the applicant requests reconsideration, with or without amendment of the application, the application shall be reexamined.

(4) [FINAL REFUSAL OF APPLICATION.]–An application for a patent, whose claims have been twice refused on substantially the same grounds, may be deemed finally refused and, if so deemed, the Office shall not be required to act further on the merits of the application, except as provided in sections 55(5) and 55(6).

(5) [RIGHT TO APPEAL.]–An applicant for a patent, whose application has been finally refused or any of whose claims have been twice refused, may appeal from the decision to the Board of Patent Appeals.

(6) [RIGHT TO CONTINUED PROSECUTION.]–Continued examination of applications for patent shall be made available to the applicant, upon request of the applicant and the payment of the fee therefor, once the application has been finally refused or has been allowed.

(7) [ABANDONMENT FOR FAILURE TO TAKE ACTION.]–Upon failure of the applicant to prosecute the application within a reasonable time period set by the Office after any action requiring a response, notice of which has been provided to the applicant, the application shall be regarded as abandoned, unless it be shown to the satisfaction of the Office that such delay was unintentional. Except for a requirement to make an election section 56(1), the period for taking action in response to a communication from the Office shall in no case be less than three months from the date of the communication.

(8) [RIGHT TO AMEND OR CORRECT UNLESS NEW MATTER.]–Amendments shall be permitted to be made to the specification or claims as a matter of right at any time prior to the grant of the patent, unless the application has been finally refused or notice has been given to the applicant that all the pending claims have been allowed. In these circumstances, amendments shall be permitted as a matter of right only upon the applicant's request for continued examination. No amendment to the specification may introduce subject matter beyond that contained in the specification at the filing date of the application for patent, except that the correction of a clear mistake or manifest clerical error that would be understood as such by a

person of ordinary skill in the art shall not be deemed new matter.

Article 7 – Required provisions of national law relating to the right of appeal.

The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that an applicant for a patent, one or more of whose claims are deemed finally refused following an appeal to the administrative body duly constituted by the patent office to hear and decide such appeals may appeal such a final decision of the patent office to a competent judicial body having jurisdiction to order the patent office to grant the patent.

§57 – Right of appeal.

An applicant for a patent, one or more of whose claims are deemed finally refused following an appeal to the Board of Patent Appeals may appeal such a final decision of the Office to the Court of Appeals for the Federal Circuit.

Article 8. – Required provisions of national law relating to reexamination.

[IPO Position Under Construction].

Article 9 – Required provisions of national law relating to claims in a patent.

(1) [CLAIM CONSTRUCTION.]–The national law of each Contracting Party shall provide claim construction for a patent claim shall consist of (a) literal construction of the claim and (b) a determination of equivalents.

(2) [LITERAL CLAIM CONSTRUCTION.]–The national law of each Contracting Party shall provide that each claim in a patent shall be literally construed in the manner that a claim in an application for patent is construed under Article 5 … [Details of IPO position under construction.]

(3) [DETERMINATION OF EQUIVALENTS.]–The national law of each Contracting Party shall provide that each element in a claim in a patent shall be construed to include equivalents of the literal construction thereof whenever … [Details of IPO position under construction.].

(4) [PRESUMPTION OF VALIDITY.]–The national law of each Contracting Party requiring pre-grant examination for patentability shall provide that, except in a reexamination proceeding, each claim in a patent shall be separately and independently presumed to meet the requirements of patent validity and the burden shall be on a challenger to establish the invalidity of a patent claim.

§59 – Claims in a patent.

(1) [CLAIM CONSTRUCTION.]–Claim construction for a patent claim shall consist of (a) literal construction of the claim and (b) a determination of equivalents.

(2) [LITERAL CLAIM CONSTRUCTION.]–Each claim in a patent shall be literally construed in the manner that a claim in an application for patent is construed under section 55, …

(3) [EQUIVALENT ELEMENTS.]–Each element in a claim in a patent shall be construed to include equivalents of the literal construction thereof whenever … .

(4) [PRESUMPTION OF VALIDITY.]–Each claim in a patent shall be separately and independently presumed to meet the requirements of patent validity and the burden shall be on a challenger to establish the invalidity of a patent claim.

Article 10 – Required provisions of national law relating to publication of applications.

(1) [REQUIREMENT TO PUBLISH WITHIN 18 MONTHS.]–The national law of each Contracting Party shall provide that every then pending national application for patent shall be published immediately following eighteen (18) months from the filing date of the application or, if a claim for priority is made, from the priority date.

(2) [REQUIREMENT TO PERMIT EARLIER, ELECTIVE PUBLICATION.]–The national law of each Contracting Party shall provide that, should the applicant for patent so request, the publication of the application for patent may be made as soon as possible following the request.

§60 – Publication of applications.

(1) [REQUIREMENT TO PUBLISH WITHIN 18 MONTHS.]–Every then pending application for patent shall be published immediately following eighteen (18) months from the filing date of the application or, if a claim for priority is made, from the priority date.

(2) [REQUIREMENT TO PERMIT EARLIER, ELECTIVE PUBLICATION.]–Should the applicant for patent so request, the publication of the application for patent shall be made as soon as possible following the request.

Article 11 – Relationship of treaty articles to regulations, examination guidelines, and regional patent systems.

(1) [REGULATIONS.]–Regulations shall be maintained under this Treaty. These regulations shall provide or prescribe additional provisions of substantive patent law that shall be consistent with the articles of this Treaty, but without adding additional or different requirements for a claim to be validly patentable. In general, these regulations shall set forth details for the implementation of this Treaty, and shall specify any administrative requirements, matters or procedures. The Regulations shall have no effect where they conflict with any provision of this Treaty and may be amended only by an affirmative vote of a majority of the voting Contracting Parties (excluding abstentions) The national law of each Contracting Party shall implement these regulations.

(2) [EXAMINATION GUIDELINES.]– Examination Guidelines, that shall include a manual of patent examining procedures, shall be maintained under this Treaty and shall provide or prescribe guidelines for the conduct of the filing, examination, and issuance of patents under the provisions of this Treaty and its Regulations. The Examination Guidelines shall have no effect where they conflict with any provision of this Treaty and may be amended by the International Bureau based on proposed amendments presenting by patent offices representing at least fifty percent of all patents issued by all the Contracting Parties.

(3) [REGIONAL PATENT OFFICES AND PATENTS.]–Where this Treaty binds a regional patent system, the provisions of this Treaty addressed to the national law of a Contracting Party shall apply *mutatis mutandis* to the regional patent system.

Appendix B
Notes on Substantive Provisions of Law (Articles 1 and 2)

The Article 2 provisions of the treaty can be summarized as follows in terms of their impact on U.S. patent law:

The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–	
(a) [INDEFINITENESS]–the claim fails to identify with reasonable clarity and specificity the subject matter being claimed;	U.S. standard on "indefiniteness" is adopted; no European "conciseness" requirement added.
(b) [INADEQUATE DISCLOSURE]–the application does not contain an adequate disclosure of the claimed subject matter because the application fails to–	U.S. requirement for a "best mode" disclosure is not adopted.
(1) LACK OF DESCRIPTION]–provide a description of the subject matter or	U.S. standard adopted requiring a separate "description" demonstrating possession of the invention.
(2) [LACK OF ENABLEMENT]–enable persons with ordinary skill in art to make and use the subject matter without engaging in undue experimentation;	U.S. standard for "enablement" is adopted; reference for enablement is to a person of ordinary skill in the art.
(c) [INCOMPLETE NAMING OF INVENTORS]–the application or patent fails to name, or has not been corrected to name, each of the inventors of the subject matter;	Right to a patent remains the inventor's, but invalidity limited to failure to name or amend to name an inventor; liberalized practice.
(d) [LACK OF NOVELTY]–an identical and adequate disclosure of such subject matter is set out in a single prior art disclosure;	U.S. standard on "anticipation" is adopted.
(e) [OBVIOUSNESS]–the subject matter as a whole would have been obvious to an ordinarily skilled person in the art to which the subject matter pertains, based on the differences between such subject matter and the prior art, provided that non-obviousness shall not be negatived by the manner in which the invention was made;	U.S. standard on "non-obviousness" is adopted; "problem-solution" approach under "inventive step" criteria is rejected as too technical and artificial.
(f) [LACK OF USEFULNESS]–the subject matter is not practically useful for a substantial purpose or effect available as of the filing date;	U.S. standard on "utility" is adopted; "industrially applicable" is rejected as too technical and exclusionary.
(g) [INELIGIBLE SUBJECT MATTER]–the claim fails to characterize the claimed subject matter as a tangible product, a method, or an improvement of such a product or method; and	U.S. standard on "patent-eligible" subject matter is adopted; "everything under the sun made by man" will be deemed patentable.
(h) [DOUBLE PATENTING]–(i) another claim with identical limitations has previously issued to the applicant in another patent having effect in the same jurisdiction or (ii) the subject matter is directed to an obvious variation of patented subject matter of another claim issued to the applicant in another patent, not a prior art disclosure with respect to the claim, having (A) effect in the same jurisdiction, (B) an earlier priority date than the priority date of the claim, and (C) an earlier expiration date than the expiration date of a patent issued on the claim.	U.S. law on "double patenting" is mandated (both "same invention" and "obviousness-type;" European practice of "self-collision" is removed.

These eight patentability criteria depend on the development of a globalized system for determining what constitutes a prior art disclosure. This "globalized prior art" definition consists of two parts:

(1) Public prior art disclosures. These are disclosures made adequately and effectively accessible to persons skilled in the art anywhere in the world, except for disclosures made within one year from the priority date for the claimed subject matter by or on behalf of the inventive entity of the claimed subject matter. This one-year exclusion produces a "grace period" for the inventor's disclosures.

(2) Prior patent filing disclosures. These are disclosures made constructively by filing an application for patent having effect in a Contracting Party country that thereafter becomes a published application or an issued patent, except for such prior public patent disclosures made within 18 months from the priority date by the same applicant for patent. This produces an 18-month period (*i.e.*, the normal interval between priority filing and publication of the patent application) when two patent filings by the same applicant cannot "self-collide." Self-collision occurs when an earlier-filed application discloses the same subject matter that is claimed in a later-filed application of the same applicant.

The details for several of these concepts is set out below, together with their relationship to existing efforts at harmonization and corresponding principles of national patent laws:

Indefinite Claims – Absence of Reasonable Clarity

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> (a) [INDEFINITENESS]–the claim fails to identify with reasonable clarity and specificity the subject matter being claimed… .

Assuming that the claims define patentable subject matter, the remaining purpose of the patent claims is to reasonably inform persons skilled in the art of the scope of the patent. Under the EPC, this requirement is stated in Article 84:

> The claims shall define the matter for which protection is sought. They shall be clear and concise and be supported by the description.

Under U.S. patent law, 35 U.S.C. § 112, second paragraph, provides:

> The [patent] specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Under the draft 1991 PLT, the claiming requirement was stated in the following terms:

> (1) [*Requirement of Claims in the Application*] The application shall contain one or more claims.
> (2) [*Contents of the Claims*] The claims shall define the matter for which protection is sought.
> (3) [*Style of the Claims*] The claims shall be clear and concise.

The harmonized substantive requirement is that the claim must *define* in a reasonably definite manner the subject matter embraced by the claim, *i.e.*, be *clear and specific*. In order to *define*, the claim must be written to *particularly point out* the invention. This standard adopts existing U.S. patent claiming requirements.

The requirement for conciseness, however, is jettisoned from the collection of claiming attributes provided above. Presumably, this element is inherent in the notion that the claim be a clear, definite statement of the subject matter of the invention. If it has any other –non-redundant – meaning, it could only be a troublesome one.

Inadequate Disclosure: Description, Enablement

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> …
>
> (b) [INADEQUATE DISCLOSURE]–the application does not contain an adequate disclosure of the claimed subject matter because the application fails to–
>
> (1) LACK OF DESCRIPTION]–provide a description of the subject matter, or
>
> (2) [LACK OF ENABLEMENT]–enable persons with ordinary skill in art to make and use the subject matter without engaging in undue experimentation… .

The disclosure requirements set forth above are intended to take the some established elements of patent law from the industrialized countries and adopt clear and simple requirements that can be objectively determined.. Hence, the disclosure needed to establish the right to claim certain subject matter depends only on a demonstration of *a description* of the subject matter claimed and *enablement* so that skilled persons can

practice the invention. These requirements are summarily provided in Article 82 of the EPC:

> The European patent application must –
> [1] disclose the invention
> [2] in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The U.S. patent law provides an additional, highly problematic requirement not found in the patent laws of other industrialized countries, namely the "best mode" disclosure requirement. 35 U.S.C. § 112 provides:

> The [patent] specification shall contain –
> [1] a written description of the invention, and
> [2] of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and
> [3] *shall set forth the best mode contemplated by the inventor of carrying out his invention*.

Little justification would appear to exist to maintain a "best mode" disclosure requirement, particularly in light of recent decisions of the U.S. courts limiting the requirement to the personal *contemplations* of the inventor.[10].

The proposal above is clearly consistent with Article 3 of the draft 1991PLT, that was based simply the wording from the European Patent Convention,[11] but explicitly adopts U.S. patent law on "adequate disclosure" as the harmonized standard.[12]

---

[10] *Glaxo Inc. v. Novopharm Ltd.,* 34 U.S.P.Q.2d 1565, 52 F.3d 1043 (Fed. Cir. 1995), in which the court noted:

> The best mode of carrying out an invention, indeed if there is one, to be disclosed is that "contemplated by the inventor." That the best mode "belongs" to the inventor finds consistent support in previous statutory language as well. Additionally, the commentary on the 1952 Patent Act states with respect to the best mode provision that A[t]his requirement, it should be noted, is not absolute, since it only requires disclosure of the best mode contemplated by the inventor, presumably at the time of filing the application." P.J. Federico, Commentary on the New Patent Act, 35 U.S.C.A. 1, 25 (1954).

[11] Article 3 in draft form provided simply:

Improper Inventorship Bar

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> …
>
> (c) [INCOMPLETE NAMING OF INVENTORS]–the application fails to name, or has not been corrected to name, each of the inventors of the subject matter as of the priority date… .

The "inventorship" requirement under which a patent claim might be denied or rejected is simply that the application failed to include at least all the true inventors. 1992 PCT Article 4(1)(v) provides that the Request for filing the international application include:

> the name of and other prescribed data concerning the inventor where the national law of at least one of the designated States requires that these indications be furnished at the time of filing a national application.

For purposes of conducting a harmonized examination, the identification of the true inventors is mandatory. It follows both United States[13] and European[14] law that the

---

> The application shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art.

This statement, although brief, is not nearly so informative as the more complete formulation of this principle contained in the above proposal.

[12] The European requirement that the claims be "adequately supported" in the patent specification is not maintained, except to the extent that this "support" requirement could be viewed as requiring a demonstration of possession of the claimed invention. To this extent, the requirement becomes one of determining if a claim is validly patentable – whether in an application for patent or in an issued patent.

[13] United States patent law is replete with inventor-designation requirements. *Cf.*, 35 U.S.C.§§ 101, 115, and 116. All major bar and trade groups, however, support permitting patent applications to be made in the name of the assignee, albeit with proper naming of the inventors.

[14] See Article 60(1) of the European Patent Convention providing that: "The right to European patent shall belong to the inventor or his successor in title." Moreover, Article 62 makes clear that, "The inventor shall have the right, vis-a-vis the applicant for or proprietor of a European

patent right is the inventor's right. An application over-designating or under-designating persons named as inventors cannot be attacked if the designation of inventors is amended.

Novelty and Non-Obviousness – Prior Art Disclosures; Prior Art; Grace Period; Self-Collision/Double Patenting; Senior Right

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> …
>
> (d) [LACK OF NOVELTY]–an identical and adequate disclosure of such subject matter is set out in a single prior art disclosure;
>
> (e) [OBVIOUSNESS]–the subject matter as a whole would have been obvious to an ordinarily skilled person in the art to which the subject matter pertains, based on the differences between such subject matter and the prior art, provided that non-obviousness shall not be negatived by the manner in which the invention was made… .

Novelty relates to a single "prior art disclosure" while non-obviousness is determined by the scope and content of the "prior art" as a whole. These are both defined terms:

> "Prior art disclosure" with respect to a claim means a single public prior art disclosure or a single prior patent filing disclosure.
>
> "Public prior art disclosure" with respect to a claim means a disclosure that is made reasonably and effectively accessible to persons skilled in the art
>
> (1) more than one year prior to the priority date of the claim or
>
> (2) if the disclosure not made directly or indirectly by or on behalf of the inventive entity of the claim, at any time before the priority date of the claim.

---

patent, to be mentioned as such before the European Patent Office." Similarly, Article 81 provides:

> The European patent application shall designate the inventor. If the applicant is not the inventor or is not the sole inventor, the designation shall contain a statement indicating the origin of the right to the European patent.

> "Prior patent filing disclosure" with respect to a claim of an applicant means subject matter disclosed in a patent issued by a Contracting Party or application for patent published by a Contracting Party where such disclosure in the issued patent or published application was filed
>
> (1) more than more than eighteen months prior to the priority date of the claim or
>
> (2) if the issued patent or published application was not filed by the applicant, at any time before the priority date of the claim;
>
> provided that, to the extent the subject matter was disclosed in a priority application for which the issued patent or published application was entitled to a right of priority, it shall be deemed that such disclosure was filed on such priority date for the issued patent or published patent application.
>
> "Prior art" with respect to a claim in an application for patent means any prior art disclosure that is pertinent to the subject matter of the claim or any combination of such pertinent prior art disclosures where a person of ordinary skill in the art would have been motivated to combine such disclosures.

A. Prior Art.

The most important part of the substantive law of patents relates to the underlying issue of patentability – novelty and inventive step – with respect to the prior art. The predicate for the assessment of the existence of differences (novelty) and the quality of those differences (non-obviousness) over the prior art lies, of course, in the very definition of the elements of what is "prior art" and what constitutes a single "prior art disclosure."

Where inventors are afforded a grace period, the definition of prior art necessarily reduces to two separate categories of public prior art disclosures. The first category consists of disclosures made by someone other than the inventor. These disclosures become prior art immediately – any later-filed application is subject to this type of prior art. The second category encompasses disclosures made by or on behalf of the inventor. Because of the grace period, such disclosures have effect as prior art only if the filing of the patent application is delayed beyond the grace period. Thus, only the disclosures made by or on behalf of the inventor – directly or indirectly – more than one year prior to the filing of the application for patent become prior art (or patentability defeating) against the inventor.

Regardless of which of the two categories of prior art is involved, some touchstone is needed to determine whether, in the first instance, a "disclosure" exists and, in the second instance, whether it is the nature or type of disclosure that qualifies as "art." In the United States, for example, the definition of "prior art" is only implicit in the patent statutes. Patents and printed publications are automatically accorded the status of prior art. So are "public uses" of the invention, notwithstanding that the use is not "public" in any normal sense of the term. Similarly, the U.S. patent law speaks of things "known or used by others" as prior art – implying, although not stating, that what is meant by the statute is *public* knowledge or use by others.

The standard under the EPC is equally obscure – and terser. Without a "grace period," Europe needs only to account for one category of prior art, providing in Article 54(2) of the EPC that:

> The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application.

Unfortunately, "made available to the public" has come to mean anything divulged by the inventor that is not a *private* disclosure, *e.g.*, a disclosure made under some obligation of confidence.

The draft PLT provided what appears to be an EPC-like solution, providing in draft Article 11(2)(b) that:

> The prior art shall consist of everything which, before the filing date or, where priority is claimed, the priority date of the application claiming the invention, has been made available to the public anywhere in the world.

In contrast, the harmonized examination criteria proposed above create an objective standard that – as do all current notions of "prior art" – requires an actual "disclosure." In simple terms, the inventor or the applicant must have some activity that is not an internal communication, but an external one. Further, the disclosure must not merely be "public" in this sense, but "public" in the sense that the disclosure was effectively accessible to persons skilled in the art. Thus, the European/PLT view that might have permitted an inaccessible, even accidental, disclosure from qualifying as prior art is totally rejected. Similarly, the peculiar U.S. idea that a non-public, secret, non-informing "public use" can somehow become prior art is equally emphatically rejected.

The idea that a disclosure must be reasonably or effectively accessible to persons skilled in the art as a prerequisite to being prior art is designed to more accurately match the policy underpinnings of the patent systems. If persons skilled in the art have no effective benefit from a "disclosure," then the inventor providing such a disclosure has the patent reward fully preserved. Moreover, persons skilled in the art *can find all the*

relevant prior art by looking for it. For "secret prior art," by definition, this simple task cannot be done.

The other obvious consequence of this definition is that the prior art determination – unlike current U.S. law – cannot have a territorial aspect. The U.S. limitations on prior art to "known or used *in this country*" or "in public use . . . *in this country*" are rendered obsolete. Given the globalization of information technology, what is reasonably accessible to persons skilled in the art anywhere is reasonably accessible to persons skilled in the art *everywhere*.

B. Senior Right.

The "senior right" bar to a patent is important because it defines the rules for priority of invention where two or more rival groups of inventors seek to patent the same or substantially the same subject matter – *and neither inventive entity otherwise represents prior art to the other*. In general, these are situations where either the two groups of inventors have secret, copending applications for patent (*e.g.*, have filed within 18 months of one another) such that the publication of the senior-filed patent application does not impose a categorical bar to patenting the same (or merely obviously different) subject matter.

The EPC specifies a senior right rule that is novelty-only, but additionally operates against an inventor's own prior-filed, copending application. Thus, the European practice results in not only a "first-to-file" priority rule, but additionally imposes a "self-collision" rule. This double defeating effect on patents is set forth in Articles 54(3) and (4), defining "novelty" in the following manner:

> (3) Additionally, the content of European patent applications as filed, of which the dates of filing are prior to the date referred to in paragraph 2 and which were published under Article 93 on or after that date, shall be considered as comprised in the state of the art.
> (4) Paragraph 3 shall be applied only in so far as a Contracting State designated in respect of the later application, was also designated in respect of the earlier application as published.

In the United States, the "first-to-invent" priority rule provides somewhat redundant patent-defeating effects, one relating to prior inventions of another, a second relating to prior-filed U.S. patent applications of another. Thus, while the U.S. priority rule correctly avoids a "self-collision" component, it nonetheless is problematic because it requires a "patent inference" proceeding in order to assess whether subject matter claimed by rival inventors is "obviously different." Accordingly, it is essential to any effort at harmonized examination to reject the complexity of the first-to-invent rule and the attendant need for patent interference proceedings. Since this rule almost invariably

operates in practice to award patents to the first to file in any event, it cannot conceivably be worth the complexity relative to the alternative of a first-to-file system.

Experience with the "novelty-only" rule under the European Patent Convention has demonstrated that this rule creates as many hyper-technical distinctions as the assessments of "same patentable invention" under U.S. interference practice. To some degree, this complexity relates to the "self-collision" feature of European patent law, a feature that needlessly complicates the procurement of European patents in any event. European experience, therefore, suggests that neither the "novelty-only" aspect of senior right nor the immediate "self-collision" aspect should be retained in any harmonized standard in the manner currently applied in Europe.

The only residual issue in a harmonized examination context is whether the "senior right" effect should be accorded to *every* prior-filed patent or published application or only those existing in a particular designated state: Is the "senior right" bar to be given a *national* effect (*i.e.*, effective with respect only to later-filed applications in the same country) or an *international* effect (*i.e.*, the filing and publication of a patent application in any one Contracting Party country has effect in every country). Arguments can be structured on both sides of the issue. However, only one solution provides a harmonized, global solution.

The optimal solution is to provide that every earlier application for patent filed in any Contracting Party country creates a senior right bar in every other Contracting Party country. This solution provides the first-filing patent applicant in any Contracting Party country with a guarantee of "freedom to use" the disclosed invention in all Contracting Party countries. Moreover, the effect should be the same whether the earlier-filed application is an international application or a filing by the national route. Hence, it ought to form the perfect compromise because it will inherently produce *identical* outcomes of harmonized examination in every country. Moreover, this approach bears some relationship to the draft PLT treaty,[15] but cures many defects in the 1991 PLT approach:

---

[15] Article 13 of the draft 1991 PLT reflected compromises, providing that countries could elect or not elect a self-collision rule and accept or reject PCT applications as providing a senior right bar depending on their eventual status as national applications. This article appeared as follows:

> ***Article 13***
> ***Prior Art Effect of Certain Applications***
>
> (1) [*Principle of "Whole Contents"*]
>
> (a) Subject to subparagraph (b), the whole contents of an application ("the former application") as filed in, or with effect for, a Contracting Party shall, for the purpose of determining the novelty of an invention claimed in another application filed in, or with effect for, that Contracting Party, be considered as prior art from the filing date of the former application on condition that the former application or the patent granted thereon is published subsequently by the authority competent for the publication of that application or patent.

While the current EPC notion of immediate "self-collision" is not retained in its present form, the proposal above contains a "self-collision" principle where a second patent application is filed by the same applicant more than 18 months from the filing date of a first application of that applicant. In this situation, the first-filed application has its "whole contents" serve as prior art with respect to the later-filed application. This principle assures that the publication of the earlier filed application effectively becomes prior art at the time of its publication and no "grace period" exists for the year following the publication of the application.

C. Obviousness.

The second of the two linchpins of patentability is the requirement for non-obviousness. In simple terms, would the invention have been obvious to persons skilled in the art at the time the invention was made. There are both substantive and linguistic differences in how this common standard is expressed around the world. Under the EPC,

---

(b) Where the former application referred to in subparagraph (a) claims the priority of an earlier application for a patent, utility model or other title protecting an invention, matter that is contained in both the former application and such earlier application shall be considered as prior art in accordance with subparagraph (a) from the priority date of the former application.

(c) For the purposes of subparagraph (a), the "whole contents" of an application consists of the description and any drawings, as well as the claims, but not the abstract.

(2) [*Applications No Longer Pending*] Where the former application referred to in paragraph (1)(a) has been published in spite of the fact that, before the date of its publication, it was withdrawn or abandoned, was considered withdrawn or abandoned, or was rejected, it shall not be considered as prior art for the purposes of paragraph (1)(a).

(3) [*International Applications Under the PCT*] As regards international applications filed under the Patent Cooperation Treaty, any Contracting Party may provide that paragraph (1) shall apply only if the acts referred to in Article 22 or, where applicable, Article 39(1) of that Treaty have been performed.

(4) [*Self-Collision*]

(a) *Any Contracting Party may provide that* paragraph (1) shall not apply when the applicant of, or the inventor identified in, the former application, and the applicant of, or the inventor identified in, the application under examination, is one and the same person.

the standard set forth in Article 56 uses the terms "inventive step" and "non-obviousness" interchangeably:

> An invention shall be considered as involving an *inventive step* if, having regard to the state of the art, it is *not obvious* to a person skilled in the art.

The essence of U.S. statutory law is to the same effect (35 U.S.C. § 103(a)):

> [T]he subject matter as a whole would [not] have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Article 11(b)(3) of the draft 1991 PLT is a second reprise of the non-obviousness notions expressed above:

> An invention shall be considered to involve an inventive step (be non-obvious) if, having regard to the prior art . . ., it would not have been obvious to a person skilled in the art at the filing date . . . .

The harmonized substantive standard would – in restating contemporary notions of non-obviousness – additionally observe that the combination of prior art disclosures necessary to effect a conclusion of obviousness must reflect the proper motivation of persons skilled in the art to combine references. Hence, the harmonized standard includes the concept of a "motivated combination" of prior art disclosure. The harmonized substantive standard categorically avoids setting forth, however, a formula for conducting a non-obviousness inquiry. This is a purposeful omission, indicating that no one formula or methodology, *e.g.,* the "problem-solution" analysis undertaking in the European Patent Office is a *necessary* analysis or required criterion to demonstrate non-obviousness.

D. Self-Collision/Double Patenting and Grace Period.

A final set of issues relates to the pre-filing activities of inventors and applicants and when these activities result in a bar to patenting. Under the above definitions, disclosures made by or on behalf of an inventor do not become "barring public disclosures" for one year, producing a "one-year grace period." Similarly, an applicant's filing of a patent application that is later published or patented does not become a "barring constructive patent disclosure" for an 18-month period, producing an 18-month immunity from "self-collision" and "obviousness-type double patenting."

The adoption of a "grace period" and the elimination of "self-collision" diverge from the European practice of "absolute novelty" (a pre-filing divulgation by the inventor will preclude patenting) and "self-collision" (a prior-filed application is a novelty-only

bar to patenting the same subject matter in any later-filed application, including one by the same applicant).

Similarly, the existing U.S. law on "double patenting" is adopted, including insofar as "obviousness-type double patenting" is concerned. Patents by the same applicant (assignee) can have claims that differ from one another by only an "obvious variation," where the difference in priority dates for the two patents is 18 months or less because of the anti-self-collision provisions. Where, however, the patent expiration would not similarly be prolonged, there is no policy or other reason for not permitted the second patent – expiring no later than the first – even though the claims in the second application or patent differ in only an obvious manner from those of the first.

In both situations "double patenting" situations ("same invention" and "obviousness-type:"), an applicant prosecuting a portfolio of related applications will avoid a number of technical traps based on an inadvertent or other failure to make a claim or use U.S.-specific mechanisms (continuation-in-part applications) to combine disclosures of a series of patent applications to immunize the resulting patents from "obviousness-type double patenting" issues.

Thus, the "non-statutory" double patenting rule would be codified and the statutory "double patenting" in 35 U.S.C. § 101 is preserved:

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> …
>
> (h) [DOUBLE PATENTING]–(i) another claim with identical limitations has previously issued to the applicant in another patent having effect in the same jurisdiction or (ii) the subject matter is directed to an obvious variation of patented subject matter of another claim issued to the applicant in another patent, not a prior art disclosure with respect to the claim, having (A) effect in the same jurisdiction, (B) an earlier priority date than the priority date of the claim, and (C) an earlier expiration date than the expiration date of a patent issued on the claim.

Practical Utility vs. Industrial or Other Commercial Application

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–

> …
> (f) [LACK OF USEFULNESS]–the subject matter is not practically useful for a substantial purpose or effect available as of the filing date… .

The relationship between how an invention is to be used and the ability to patent the invention takes different forms throughout the world. The draft 1991 PLT recognized that a relationship did exist between how an invention is used and the right to patent in Article 11(1) by noting that "at the option of the Contracting Party, [a patentable invention must] either be useful or industrially applicable." EPC Article 57 simply states that: "An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture." 35 U.S.C. § 101 of U.S. patent law permits patents for things and methods "new and useful."

The European patent law on how the effects or results produced by the invention is limited to an "industrial applicability" standard. This standard has been employed to deny patentability to *highly commercially useful* inventions. Particularly, Article 52(4) explicitly provides:

> Methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body shall not be regarded as inventions which are susceptible of industrial application . . . .

The European interpretation of the realm of "useful" inventions is, accordingly, potentially too narrow to protect entire classes of worthy inventors and worthwhile inventions. What is, therefore, required is a standard that puts the patent world and the commercial world on a coextensive footing in an information-age economy. Thus, the harmonized standard approaches the U.S. view of an all-inclusive look at the commercial value within a "useful art," in preference to a predominantly nineteenth century "industrial revolution" view of the reach of the patent system.

Eligible Subject Matter

> The subject matter of a claim in an application for patent or a patent issuing on the application shall be validly patentable to the applicant as a matter of national law of each Contracting Party, unless one or more of the following requirements of law is not satisfied–
>
> …
>
> (g) [INELIGIBLE SUBJECT MATTER]–the claim fails to characterize the claimed subject matter as a tangible product, a method, or an improvement of such a product or method… .

The final topic for the harmonized substantive patent examination is by no means the least. It is the requirement that patents be limited to technology – things and methods. In this regard, the harmonized outcome looks essentially at U.S. patent law and its fully inclusive, "everything under the sun made by man" view of patent-eligibility stated in 35 U.S.C. § 101:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

This harmonized standard follows U.S. patent law in permitting patents, irrespective of "industrial applicability," the existence of "technical features," and the production of "technical effects." All inventions in the "useful arts" would be eligible for patenting, so long as placed in the form of a product or method and that product or method is tangible.

This provision contemplates that some of the exclusions from Article 52 of the European Patent Convention could be carried forward, *e.g.,* scientific theories, mathematical methods, aesthetic creations, rules and methods for performing mental acts. Other EPC exclusions, such as that for computer software would remain, because software itself is not a "tangible product or method." However, software, like a mathematical algorithm, could be claimed in the context of a tangible method or process. Finally, other constraints set forth in the EPC would necessarily be rejected, *e.g.,* EPC Article 53(3)'s prohibition on the patenting of plant or animal varieties or essentially biological processes for the production of plants or animals.