



Date: 7th June 2015

Q244

Inventorship of multinational inventions

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Date	19-05-2015

I. Current law and practice

1) Please describe your law defining inventorship and identify the statute, rule or other authority that establishes this law.

a) If person A, located outside your country, directs the efforts of person B, located in your country, for making an invention in your country, under what circumstances would person A and/or person B be considered an inventor under your law?

In the United States of America (U.S.) 35 U.S.C. 115 requires that the correct inventor(s) be named in a patent application. In addition, 35 U.S.C. 116 establishes guidelines for joint inventorship by stating that "Inventors may apply for a patent jointly 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, or (3) each did not make a contribution to the subject matter of every claim of the patent." No statute identifies the definition of inventorship per se. Rather, the definition for inventorship is established by case law. MPEP 2137.01 summarizes relevant case law. In general, the definition of inventorship can be simply stated: "The threshold question in determining inventorship is who conceived the invention. Unless a person contributes to the conception of the invention, he is not an inventor. . . . Insofar as defining an inventor is concerned, reduction to practice, per se, is irrelevant." *Fiers v. Revel*, 984 F.2d 1164, 1168, 25 USPQ2d 1601, 1604-05 (Fed. Cir. 1993). "[T]here is no requirement that the inventor be the one to reduce the invention to practice so long as the reduction to practice was done on his behalf." In re DeBaun, 687 F.2d 459, 463, 214 USPQ 933, 936 (CCPA 1982).

However, "one who suggests an idea of a result to be accomplished, rather than the means of accomplishing it, is not an inventor." *Ex parte Smernoff*, 215 USPQ 545, 547 (Bd. App. 1982). In addition, "In arriving at . . . conception [the inventor] may consider and adopt ideas and materials derived from many sources [such as] a suggestion from an employee, or hired consultant . . . so long as he maintains intellectual domination of the work of making the invention down to the successful testing, selecting or rejecting as he goes . . . even if such suggestion [or material] proves to be the key that unlocks his problem." *Morse v. Porter*, 155 USPQ 280, 283 (Bd. Pat. Inter. 1965).

As stated above, the key to inventorship in the U.S. is who conceived the invention. *Sewall v. Walters*, 21 F.3d. 411 (Fed. Cir. 1994). Whether person A or B is an inventor, or both are joint inventors, depends on what is claimed, and who conceived the subject claimed. If A's direction to B is to "provide me with a better widget" and B conceives of such a widget, B would be the inventor. If A directs B to, for example, "reduce to practice a widget having elements (a), (b) and (c)," the combination that is ultimately claimed, then A would be the inventor. If A directs B to produce a widget having elements (a) and (b), and B conceives and produces a widget having elements (a), (b) and (c), the combination ultimately claimed, A and B would be joint inventors.

MPEP 2137.01(IV) states that persons "that merely acted under the direction and supervision of the conceivers" are not inventors. Thus, person B would never be considered an inventor and person A would be considered an inventor if person A conceived the invention. The location of persons A and B inside or outside the U.S. is not relevant to the inventorship determination.

b) Does your law defining inventorship rely on or look to a particular part of the patent application? For example, is inventorship under your law determined on a claim by claim basis, determined based on the content of the drawings or the examples, or determined on some other, and if so, what basis?

yes

Please comment:

In the U.S. inventorship is determined based on the contribution to the subject matter in the claims. 35 U.S.C. 116(a)(3) states that "[i]nventors may apply for a patent jointly even though . . . each did not make a contribution to the subject matter of every claim of the patent." (Emphasis added). MPEP 2137 also states that "the designation of authorship or inventorship does not raise a presumption of inventorship with respect to the subject matter disclosed in the article or with respect to the subject matter disclosed but not claimed in the patent. . . ." (Emphasis added). Further, for joint inventorship, "[t]he inventive entity for a particular application is based on some contribution to at least one of the claims made by each of the named inventors. . . . A coinventor need not make a contribution to every claim of a patent. A contribution to one claim is enough." MPEP 2137.01(V). Regarding means-plus-function claims, "[t]he contributor of any disclosed means of a means-plus-function claim element is a joint inventor as to that claim, unless one asserting sole inventorship can show that the contribution of that means was simply a reduction to practice of the sole inventor's broader concept." *Ethicon Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1460-63, 45 USPQ2d 1545, 1548-1551 (Fed Cir. 1998). As such, the inventor or joint inventors are those identified in the cover sheet of the application, or if a cover sheet is not filed, in the application papers filed unless applicant files a paper including the processing fee supplying the name or names of the inventor or joint inventors. 37 CFR 1.41(c).

2) Does your law of inventorship depend on the citizenship of the inventor(s)?

no

Please comment:

3)	Does your law of inventorship depend on where the invention was made (e.g. on the residency of the inventor(s))?
	no
	Please comment:

4)	Can the inventorship of a patent application be corrected after the filing date in your country?
	yes
	If yes, what are the requirements and time limits for such correction?:
	<p>With the America Invents Act (AIA), certain changes were made to the patent statutes enacted by Congress and the administrative rules (also known as regulations) promulgated by the USPTO. Because the changes to the law did not change the fundamental notion of a corrective process, this answer will only refer to the current law with general applicability for corrective requests filed on or after September 16, 2012. The patent statutes allow for inventorship to be corrected in pending patent applications (35 U.S.C. §116) and patents (35 U.S.C. §256). In general, corresponding administrative rules have been promulgated by the USPTO for pending patent applications (37 CFR §1.48) and patents (37 CFR § 1.324) (note that separate rules apply to reissue applications and contested proceedings before the Patent Trial and Appeal Board, which for the purpose of maintaining conciseness will not be further elaborated on here). Upon filing, nonprovisional applications identify the entire inventive entity (legal names of all inventors) in an Application Data Sheet (ADS), and inventors must file a declaration before patent grant. Corrective procedures are outlined below for (1) a nonprovisional application, (2) a provisional application and (3) a patent. (Correction of inventorship in a pending nonprovisional application may also be obtained by filing a continuing application under 37 CFR 1.53 without the need for filing a request under 37 CFR 1.48, although the requirements for a request filed on or after September 16, 2012 are minimal. MPEP §602.01(c)III.) Statutes and rules do not expressly set time limits for correction, but separate procedures are called out for pending nonprovisional applications versus patents. Although provisional applications will expire, there is no prohibition to correcting a provisional application after its expiration.</p> <p>1. Nonprovisional Application</p> <p style="padding-left: 20px;">(a) Incorrect or Adding Inventors</p> <p>To correct inventorship in a nonprovisional application where the ADS or inventor’s declaration (or oath) has already been filed:</p> <ul style="list-style-type: none"> • a request signed by the practitioner; • a new inventor’s declaration by the inventor(s) being added; • an ADS in mark-up form under 37 CFR §1.76(c) identifying the legal names of all inventors; and • a processing fee set forth in the rules (37 CFR §1.17) if filed after the first Office Action on the merits or if a statement is filed that the correction is being made due solely to cancellation of claims. <p style="padding-left: 40px;">(b) Removing Inventors</p> <p>To remove an inventor in a nonprovisional application where the ADS or inventor’s declaration (or oath) has already been filed:</p> <ul style="list-style-type: none"> • a request signed by the practitioner; • an ADS in mark-up form under 37 CFR §1.76(c) identifying the legal names of all inventors; and • a processing fee set forth in the rules (37 CFR §1.17) if filed after the first Office Action on the merits or if a statement is filed that the correction is being made due solely to cancellation of claims. <p>2. Provisional Application</p> <p>Any request to correct or change inventorship in a provisional application after a cover sheet with</p>

inventor information or ADS has been filed (note that no inventor's declaration is required in a provisional application):

- a request signed by the practitioner;
- an ADS in mark-up form under 37 CFR §1.76(c) identifying the legal names of all inventors; and
- a processing fee set forth in the rules (37 CFR §1.17).

3. Patent

To correct inventorship after issuance (under 35 U.S.C. §256(b) a federal court may also order the correction of inventorship), a petition must be accompanied with a certificate of correction and include the following:

- a statement from each person being added as an inventor;
- a statement from each person currently named as an inventor where named inventors must either agree or have no disagreement with the addition of named inventor(s);
- a statement from all assignees agreeing to the change of inventorship;
- a processing fee for correcting inventorship in a patent set forth in the rules (37 CFR §1.20).

While a certificate of correction under 35 U.S.C. §256 is the most common way to correct inventorship of a patent, other methods of correcting inventorship also exist in the U.S. For instance, inventorship may also be corrected by filing a reissue application under 35 U.S.C. §251. See MPEP 1402.II. Inventorship can also be corrected without a certificate of correction where a patent is subject to ex parte reexamination proceedings. See MPEP 2258.IV.F.

5) What are the possible consequences of an error in the stated inventorship on a patent application in your country? Can a patent issued from such an application be invalidated or rendered not enforceable on that basis? Does it matter whether the error was intentional or unintentional?

Examiners in examining U.S. patent applications must reject applications where inventorship errors are identified. *PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc.*, 225 F.3d 1315, 1321 (Fed. Cir. 2000); see also, Manual of Patent Examining Procedure §2137.01, 9th ed. (Mar. 2014) ("For applications subject to the first inventor to file provisions of the AIA . . . the claims should be rejected under 35 U.S.C. 101 and 35 U.S.C. 115 for failing to set forth the correct inventorship . . . for applications not subject to the first inventor to file provisions, the claims should be rejected under pre-AIA 35 U.S.C. 102(f)."). An issued U.S. patent can be held invalid for an error in stated inventorship. *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1350 (Fed. Cir. 1998) ("When a party asserts invalidity under § 102(f) due to nonjoinder, a district court should first determine whether there exists clear and convincing proof that the alleged unnamed inventor was in fact a co-inventor."). An inventorship error in an issued U.S. patent can be corrected, however, even during litigation. 35 U.S.C. § 256 (2012); *Pannu*, 155 F.3d at 1350 ("Upon such a finding of incorrect inventorship, a patentee may invoke section 256 to save the patent from invalidity. Accordingly, the patentee must then be given an opportunity to correct inventorship pursuant to that section. Nonjoinder may be corrected 'on notice and hearing of all parties concerned' and upon a showing that the error occurred without any deceptive intent on the part of the unnamed inventor."). Historically, a U.S. patent could be held unenforceable for inequitable conduct for a material misrepresentation regarding inventorship with an intent to deceive the Patent Office. *PerSeptive Biosystems, Inc.*, 225 F.3d at 1322. In the U.S., patent ownership rights are held by the individual inventor unless they have been assigned. *Beech Aircraft Corp. v. EDO Corp.*, 990 F.2d 1237, 1248 (Fed. Cir. 1993) ("At the heart of any ownership analysis lies the question of who first invented the subject matter at issue, because the patent right initially vests in the inventor who may then, barring any restrictions to the contrary, transfer that right to another, and so forth."). Also, each owner of a patent must consent to bringing suit under a patent. *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1468

(Fed. Cir. 1998) (“Further, as a matter of substantive patent law, all co-owners must ordinarily consent to join as plaintiffs in an infringement suit. Consequently, ‘one co-owner has the right to impede the other co-owner’s ability to sue infringers by refusing to voluntarily join in such a suit.’”); see also, 35 U.S.C. § 262 (“In the absence of any agreement to the contrary, each of the joint owners of a patent may make, use, offer to sell, or sell the patented invention within the United States, or import the patented invention into the United States, without the consent of and without accounting to the other owners.”). Even with the availability of 35 U.S.C. § 256, a defendant in a patent lawsuit may seek to create an avenue to licensing a patent by demonstrating that the stated set of inventors erroneously excluded an inventor who has not assigned to the party bringing the action. The America Invents Act (AIA), 35 U.S.C. § 256 was amended to strike the provision indicating that innocent error is required for correcting inventorship. At least one U.S. District Court has held that the revision to 35 U.S.C. § 256 does not preclude a U.S. patent from being held unenforceable for inequitable conduct for intentional and material misrepresentations regarding inventorship. *Cyber Acoustics, LLC v. Belkin Int’l, Inc.*, 988 F. Supp. 2d 1236, (D. Or. 2013) (“Cyber availed itself of 35 U.S.C. § 256(a) and petitioned the PTO directly for a Certificate of Correction, which was granted on October 18, 2013. The streamlined correction process under the Leahy-Smith America Invents Act (“AIA”), however, does not affect any inquiry into the inequitable conduct claim pending before this Court. In fact, although the AIA removed all inquiries into subjective issues of intent to correct inventorship, these changes do not restrict judicial relief based on inequitable conduct.” (internal citations omitted)).

6) Does your law require that an application for a patent claiming an invention made in your country, whether in only one technical area or in all technical areas, be filed first in your country?

yes

If the answer is yes, please answer the following::

a) Is the law requiring first filing in your country limited to a specific area of technology or otherwise limited such that it does not apply to all inventions made in your country? If yes, please explain.

no

Please comment.:

No, but if a patent application is to be filed in another country first, a foreign filing license must be obtained before doing so. 37 C.F.R. 5.11 (or retroactively through 37 C.F.R. 5.25(a)).

NOTE: This response addresses the questions as posed from the perspective of patent application filing requirements before the USPTO and obtaining foreign filing licenses from that agency. HOWEVER, it does not address the additional and independent restrictions concerning U.S. law restricting the export of technology developed in the U.S. Such export control laws extend to transferring technical data to a foreign national, even if that person is present within the U.S. or potentially accessing U.S. technical data on a computer from outside the U.S.

b) Does your law provide for granting of a foreign filing license or similar mechanism that would allow a patent application for an invention made in your country to be filed first in another country? Please describe any such foreign filing license or similar mechanism as well as the procedure, timing, and cost of obtaining it.

yes

Please comment.:

Yes. The U.S. provides two ways of obtaining a foreign filing license. First, a petition for a foreign filing license can be filed before filing any application in a foreign patent office and without filing a U.S. patent application first. (37 C.F.R. 5.11(a)). Upon grant of the petition, i.e., the foreign filing license is granted, the applicant can file the patent application in a foreign country first.

Second, a patent application filed in the U.S. for an invention made in the U.S. is considered to include an automatic petition for a foreign filing license. (37 C.F.R. 5.12(a)) If the initial automatic petition is not granted, a subsequent petition may also be filed and must include a fee of \$50/\$100/\$200 for a micro/small/large entity. (37 C.F.R. 5.12(b)).

Petitions may be expedited by hand delivering or faxing the petition to the USPTO's Licensing and Review Office. When such an expedited petition for a foreign filing license is filed, the license will be granted within three business days from the receipt of the petition, absent any national security concerns.

If there is not a corresponding U.S. or international application filed in the U.S., the petition must also include a legible copy of the material upon which a license is desired. This copy will be used as the measure of the license. (37 C.F.R. 5.13)

If there is a corresponding U.S. application on file, the petition must identify that application by application number, filing date, inventor, and title, but a copy of the material upon which the license is desired is not required. (37 C.F.R. 5.14)

Further, a foreign filing license is NOT required if the application is not subject to a secrecy order, and was filed at least six months prior to the date on which the application is filed in a foreign country. (37 C.F.R. 5.11(e)(2))

c) If the answer to b. above is yes, is it possible to obtain a foreign filing license retroactively, for example, if a foreign filing was made without a foreign filing license due to inadvertent error?

yes

Please comment.:

Yes. (37 C.F.R. 5.25(a)) However, granting a retroactive foreign filing license is discretionary and not automatic. The petitioner must include a verified statement containing (i) an averment that the subject matter in question was not under a secrecy order at the time it was filed abroad and that it is not currently under a secrecy order, (ii) a showing that the license has been diligently sought after discovery of the proscribed foreign filing, and (iii) an explanation of why the material was filed abroad through error without the required license first having been obtained.

d) How does your law apply to an application for a patent claiming an invention that was made jointly by an inventor in your country and an inventor in another country? Does this apply based on the citizenship of the inventor, the residency of the inventor, or both? Does the nationality of the patent owner affect your answer?

Apart from requiring a foreign filing license for an invention made in the U.S., it does not require the citizenship or resident status of the inventor to be stated. The U.S. examination process does not inquire about where the invention was made.

No, this does not apply to based on the citizenship of the inventor or the residency of the inventor.

No, the nationality of the patent owner does not affect the answer.

e) In the case of an invention made jointly by an inventor in your country and an inventor in another country, would it violate your law if a request for a foreign filing license was filed in the other country before being filed in your country?

yes

Please comment.:

Yes. However, a foreign filing license can be obtained retroactively from the USPTO with a verified statement containing (i) an averment that the subject matter in question was not under a secrecy order at the time it was filed abroad and that it is not currently under a secrecy order, (ii) a showing that the license has been diligently sought after discovery of the proscribed foreign filing, and (iii) an explanation of why the material was filed abroad through error without the required license first having been obtained.

In some technology areas this may present an issue both in the U.S. as well in other countries. For example, typical national security interest technologies, e.g. nuclear, weapons, etc.

NOTE: As at the outset of this response, we note again that this response does not address the potential issue of violation of U.S. export control law. Violation of those laws can result in criminal and civil, and administrative penalties.

However, 35 USC §184 states that "Except when authorized by a license obtained from the Commissioner of Patents a person shall not file or cause or authorize to be filed in any foreign country prior to six months after filing in the United States an application for patent." This can include sending documents to a local foreign agent even if he has not filed the application until after a foreign filing license is granted.

This is perhaps the most complicated issue where multinational "invention" occurs, i.e., where the facts are reasonably clear in a given case that the contribution of the collaborators indicates the "invention was made" in both the U.S. and the non-US country. If the invention were clearly "made" in only one country then the question of filing in a country other than the country where in the invention was made must be carefully managed in terms of the timing of releasing the invention information in compliance with 37 CFR 5.11(b) and 5.11 (c).

It is readily foreseeable that in some cases it will not be reasonably clear whether the "invention was made" wholly in one country, or both. The current U.S. law on this is unclear for lack of guidance from USPTO or litigation at courts on this phrase.

An increasingly common situation is where a multinational company has research and development based both inside and outside the U.S. For example, in common situations, there is at least one U.S. inventor and at least one non-U.S. national or located inventor, e.g. a citizen or resident of the UK or China and foreign filing licenses are needed from the U.S. and the UK or China. One way of complying with the US, UK or Chinese regulations is to file for U.S. expedited foreign filing license first and then to obtain the UK or Chinese foreign filing license after U.S. foreign filing license was granted. Those and other cross-border compliance issues often depend on the wording of local laws.

f) What are the possible consequences for failing to comply with this law? Does it matter whether the error was intentional or inadvertent?

Failing to comply with this law bars any patent(s) from such a patent application or renders any patent(s) issued from such an application invalid. 35 U.S.C. §185. Violating an order of secrecy may further result in a fine of not more than \$10,000 and/or imprisonment of not more than two years. 35 U.S.C. §186.

NOTE: As at the outset of this response, we note again that this response does not address the potential issue of violation of U.S. export control law. Violation of those laws can result in criminal and civil, and administrative penalties.

7) Does your law require that a patent application claiming an invention made, at least in part, in your country undergo a secrecy review or similar process before it can be filed in another country?

yes

If yes please answer the following questions::

a) Does this law depend on the area of technology that is disclosed and claimed in the patent application?

Under the U.S. patent law, a foreign filing license is required before applying for patent in a foreign patent office or any international agency other than the U.S. receiving office, if the invention is made in the U.S. Filing of a patent application in the USPTO for inventions made in the U.S. is considered to include a petition for foreign filing license for the subject matter of the application. An applicant can also petition for a foreign filing license before filing an application. See *37 C.F.R. 5.12 & 5.13*.

All provisional applications, non-provisional applications and international applications filed in the USPTO are screened for issuance of a foreign filing license. The filing receipt issued by the USPTO will indicate either that a foreign filing license is granted or that the application is under secrecy review. If an application is indicated as under secrecy review, the application has been referred to a government agency for national security review. In the U.S., the secrecy review should last no longer than six months. At the end of six months from filing, a foreign filing license is automatically granted unless a secrecy order is issued. See *Id.*

b) Describe this aspect of your law as well as the procedure, timing, and cost of compliance with it.

The law varies depending upon whether the U.S. Government has a property interest in the particular invention. If the government has a property interest, paragraph 1 of 35 U.S.C. § 181 requires that-

- Whenever publication or disclosure by the publication of an application or by the grant of a patent... might, in the opinion of the head of the interested Government agency, be detrimental to the national security, the Commissioner of Patents upon being so notified shall order that the invention be kept secret and shall withhold the publication of the application or the grant of a patent

If the government has no property interest in the invention, paragraphs 2-3 of 35 U.S.C. § 181 requires that-

- Whenever the publication or disclosure of an invention by the publication of an application or by the granting of a patent ...might, in the opinion of the Commissioner of Patents, be detrimental to the national security, he shall make the application for patent in which such invention is disclosed available for inspection to the Atomic Energy Commission, the Secretary of Defense, and the chief officer of any other department or agency of the Government designated by the President as a defense agency of the United States . . .
- . . . If, in the opinion of the Atomic Energy Commission, the ..., the publication or disclosure of the invention ... would be detrimental to the national security, ... the Commissioner of Patents shall order that the invention be kept secret and shall withhold the publication of the application or the grant of a patent . . .

The procedure for implementation of these laws is initially defined in MPEP § 115, which states:

- All provisional applications filed under 35 U.S.C. 111(b), nonprovisional applications filed under 35 U.S.C. 111(a), and international applications filed under the PCT, in the U.S. Patent and Trademark Office (USPTO) are reviewed for the purposes of issuance of a foreign filing license pursuant to 35 U.S.C. 184. See also 37 CFR 5.1(b). These applications are screened upon receipt in the USPTO for subject matter that, if disclosed, might impact the national security. Such applications are referred to the appropriate agencies for consideration of restrictions on disclosure

of the subject matter as provided for in 35 U.S.C. 181.

35 U.S.C. § 184(a) also requires, regarding applying in a foreign country, that-

- Except when authorized by a license obtained from the Commissioner of Patents a person shall not file or cause or authorize to be filed in any foreign country prior to six months after filing in the United States an application for patent...

Where screening of a patent application per MPEP § 115 results in a determination that its disclosure "*might*" be "*be detrimental to the national security,*" MPEP § 130 nonetheless requires that-

- Secrecy Order cases are examined for patentability as in other cases, but will not be passed to issue; nor will an interference or derivation be instituted where one or more of the conflicting cases is classified or under Secrecy Order . . .

If prosecution of the application is unsuccessful, as-

- In case of a final rejection, while such action must be properly replied to, and an appeal, if filed, must be completed by the applicant to prevent abandonment, such appeal will not be set for hearing by the Patent Trial and Appeal Board until the Secrecy Order is removed, unless specifically ordered by the Commissioner for Patents . . .

If prosecution of the application is successful, and-

- . . . is in condition for allowance, a notice of allowability (Form D-10) is issued, thus closing the prosecution . . .

The procedure regarding successful prosecution is further defined in MPEP § 1304.01, stating that-

- "Secrecy Order" applications are not sent to issue even when all of the claims have been allowed. Instead of mailing a Notice of Allowance, a D-10 Notice is sent.
- If the "Secrecy Order" in an application is withdrawn after the D-10 notice is mailed, the application should then be treated like an ordinary application in condition for allowance."

The Applicant/Inventor seeking to recover costs incurred by the secrecy order has two options provided under the law.

First, 35 U.S.C. § 183 states that-

- An applicant... whose patent is withheld as herein provided, shall have the right, beginning at the date the applicant is notified that... his application is otherwise in condition for allowance... and ending six years after a patent is issued thereon, to apply to the head of any department or agency who caused the order to be issued for compensation for the damage caused by the order of secrecy and/or for the use of the invention by the Government, resulting from his disclosure . . .

But failure to reach an agreement between the Applicant and the government, on the amount of damages, may significantly limit the amount actually awarded, as 35 U.S.C. § 183 also states that-

- If full settlement of the claim cannot be effected, the head of the department or agency may award and pay to such applicant, his successors, assigns, or legal representatives, a sum not exceeding 75 per centum of the sum which the head of the department or agency considers just compensation for the damage and/or use.

The Applicant can challenge the award of 75% compensation, as 35 U.S.C. § 183 additionally provides that-

- A claimant may bring suit against the United States in the United States Court of Federal Claims or in the District Court of the United States for the district in which such claimant is a resident for an amount which when added to the award shall constitute just compensation for the damage and/or use of the invention by the Government.

Second, the Applicant/Inventor may wait until a patent issues to seek recovery for damages, as 35 U.S.C. § 183 also provides that-

- ...The owner of any patent issued upon an application that was subject to a secrecy order issued pursuant to section 181, who did not apply for compensation as above provided, shall have the right, after the date of issuance of such patent, to bring suit in the United States Court of Federal Claims for just compensation for the damage caused by reason of the order of secrecy and/or use by the Government of the invention resulting from his disclosure. The right to compensation for use shall begin on the date of the first use of the invention by the Government...

However, judicial interpretation of the phrase "*compensation for the damage caused by the order of secrecy*" as used in 35 U.S.C. § 183, is that it must be "*actual damages*." *Constant v. United States*, 617 F.2d 239, 244 (Ct. Cl. 1980) ("*We think the consensus at the hearings was that neither the courts nor the administrative agencies would permit purely speculative damages, but that there would have to be "real concrete evidence of damage," (Id. at 32, Statement of P. J. Federico, Examiner-in-Chief, U.S. Patent Office), "actual damages..."*).

Although the plaintiff's claim to five types of damages in *Constant* was dismissed, the costs to the Applicant/Inventor may be in the form of:

1. lost profits due to interference of the secrecy order with potential business opportunities, including limited marketability of the product, by requiring compensation only with respect to the government's taking and use of the technology for a period of time, as a result of the disclosure in a patent application;
2. expenses incurred by attempts to seek rescission of the secrecy order;
3. costs associated with a delay in the filing of foreign patent applications, or the inability to file within the 1 year period prescribed by the Paris convention for applications not filed under the PCT;
4. costs associated with the inability to obtain loans required for development of the technology;
5. damages for interference with the right to compete; and
6. out-of-pocket business losses.

- c) Describe the possible consequences of failing to comply with this law. Does it matter whether the error was intentional or inadvertent?

35 U.S.C. § 182 sets forth:

- [t]he invention disclosed in an application for patent subject to an order made pursuant to section 181 may be held abandoned upon its being established by the Commissioner of Patents that in violation of said order the invention has been published or disclosed or that an application for a patent therefor has been filed in a foreign country by the inventor, his successors, assigns, or legal representatives, or anyone in privity with him or them, without the consent of the Commissioner of Patents. The abandonment shall be held to have occurred as of the time of violation. The consent of the Commissioner of Patents shall not be given without the concurrence of the heads of the departments and the chief officers of the agencies who caused the order to be issued. A holding of abandonment shall constitute forfeiture by the applicant, his successors, assigns, or legal

representatives, or anyone in privity with him or them, of all claims against the United States based upon such invention. [Emphasis added].

35 U.S.C. §186 sets forth:

- [w]hoever, during the period or periods of time an invention has been ordered to be kept secret and the grant of a patent thereon withheld pursuant to section 181, shall, with knowledge of such order and without due authorization, willfully publish or disclose or authorize or cause to be published or disclosed the invention, or material information with respect thereto, or whoever willfully, in violation of the provisions of section 184, shall file or cause or authorize to be filed in any foreign country an application for patent or for the registration of a utility model, industrial design, or model in respect of any invention made in the United States, shall, upon conviction, be fined not more than \$10,000 or imprisoned for not more than two years, or both. [Emphasis added].

There are stiff penalties for violations of a secrecy order. Under 35 U.S.C. § 182, if an inventor publishes, discloses or files for a patent on that invention in a foreign country without the consent of the Commissioner, the invention may be held abandoned. The abandonment shall constitute forfeiture of the invention. In addition, under 35 U.S.C. § 186, an inventor who, without due authorization willfully publishes or discloses the invention, or who willfully files a foreign patent application, “shall, upon conviction, be fined not more than \$10,000 or imprisoned for not more than two years, or both.” Even an inadvertent disclosure will cause the invention to be abandoned. However, for the penalties under 35 U.S.C. § 186 to attach, the publication or disclosure must be willful.

II. Policy considerations and proposals for improvements of the current law

- 8) If your law defines inventorship, is this definition sufficient to provide patent applicants with clear guidance as to who should be named as the inventor(s) of a patent application? Are there aspects of this definition that could be improved?

Defining inventorship through case law cannot lead to a precise scientific definition as to who should be named as the inventor(s) of a patent application. Whether the definition is “sufficient” depends on whether scientific precision is the goal. Measured by the general ability to name inventors in the ordinary course of patent prosecution, the small number of disputes over inventorship, and the difficulty in arriving at a precise framework, the definition is sufficient. Bear in mind that a problem in having a definition based on legal precedent is that the Federal Circuit or the U.S. Supreme Court could significantly alter the definition and render it insufficient in future decisions.

The U.S. Patent Office does not determine or question inventorship during prosecution, but a reminder may be provided in response to claim amendments that it may be necessary to amend the inventors named in the application because of the amendments. The lack of involvement by the Patent Office during routine prosecution prevents the lack of precision from causing problems for inventors.

Inventors who are omitted, and their employers, are the likely challengers to the proper naming of inventors. Challengers can present inventorship issues for determination in the Patent Office or in Court. Before the America Invents Act (AIA), competing applications could be filed in the Patent Office by an omitted inventor, and an interference declared to resolve issues over who the inventor(s) are. With the first inventor to file regime enacted by the AIA, derivation proceedings in the Patent Office are available to resolve assertions that another derived the invention claimed in a post-AIA application.

Identifying who “conceived” an invention is the crux of the inventorship inquiry. Interference case law provides guidance on the level of contribution to the conception of an invention necessary to be named an inventor. Conception is the mental part of the inventive act, but it must be capable of proof, as by

drawings, complete disclosure to another person, etc. In *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897), it was established that conception is more than a mere vague idea of how to solve a problem; the means themselves and their interaction must be comprehended also. **MPEP 2137.01** summarizes additional relevant case law.

9) If you have laws requiring first filing of patent applications directed to inventions made in your country, are there aspects of these laws that could be improved to address multinational inventions?

The U.S. does not absolutely require first filing for inventions made in the U.S. The foreign filing license process enables filing outside the U.S. first. (37 C.F.R. 5.11(a)).

10) If you have laws requiring a secrecy review of patent applications directed to some or all types of inventions made in your country, are there aspects of these laws that could be improved to address multinational inventions?

Yes. The laws could provide guidance regarding how the U.S. would seek to govern a conflict. It seems as if the law should also seek to inquire if foreign nationals are involved in developing the invention (i.e., are co-inventors), which would be apparent from the ADS, and then a different set of rules would apply. But determining exactly what rules would apply seems, in part, to fall outside of only the purview of patent law. Contractual agreements should/are made between employees and companies, and legal agreements between parent companies and subsidiaries. Harmonization would seem to require treaty agreements with various nations, particularly those with a requirement that inventors must first file in their own country.

As the multinational inventions being discussed are limited to inventions made in this country, the U.S. Government has jurisdictional authority to impose its laws on the foreign national inventor. Therefore, the aspects of the law that should be improved are the aspects that govern the compensation/remuneration of the taking of the invention. 35 USC § 183 limits the recovery to 75%, by stating in-part:

- An applicant, his successors, assigns, or legal representatives, whose patent is withheld as herein provided, shall have the right, beginning at the date the applicant is notified that, except for such order, his application is otherwise in condition for allowance, or February 1, 1952, whichever is later, and ending six years after a patent is issued thereon, to apply to the head of any department or agency who caused the order to be issued for compensation for the damage caused by the order of secrecy and/or for the use of the invention by the Government, resulting from his disclosure. The right to compensation for use shall begin on the date of the first use of the invention by the Government. The head of the department or agency is authorized, upon the presentation of a claim, to enter into an agreement with the applicant, his successors, assigns, or legal representatives, in full settlement for the damage and/or use. This settlement agreement shall be conclusive for all purposes notwithstanding any other provision of law to the contrary. If full settlement of the claim cannot be effected, the head of the department or agency may award and pay to such applicant, his successors, assigns, or legal representatives, a sum not exceeding 75 per centum of the sum which the head of the department or agency considers just compensation for the damage and/or use. [Emphasis added].

A more just and equitable compensation arrangement would allow for a world-wide economic analysis to be used in the compensation for damages.

The U.S. patent law provides that a foreign filing license is required before an application for patent for inventions made in the U.S. can be filed in any foreign patent office or international agency other than the U.S. receiving office. The U.S. patent law also provides that no foreign filing license is required if the

invention was not made in the U.S. See 37 C.F.R. 5.11.

However, the U.S. patent law provides no guidelines on what is considered to be “made in the U.S.” When an invention results from collaborations among inventors from different countries, it is often difficult, if not impossible, to identify in which country the invention was made. Sometimes, an invention can only be considered partly made in the U.S. In other cases, it may be legally determined under the patent law of two or more countries that an invention was made in each of the two or more countries. No provision is set forth in the U.S. patent law on whether a foreign filing license is required for a patent application for an invention that is only partly made in the U.S. or that is made in the U.S. and another country.

11) Are there other aspects of your law that could be improved to facilitate filing of patent applications having multinational inventorship? If yes, please explain.

No

III. Proposals for harmonisation

12) Is harmonisation in this area desirable?

yes

Please comment.:

If yes, please respond to the following questions without regard to your national or regional laws. Even if no, please address the following questions to the extent you consider your national or regional laws could be improved.

13) Please provide a definition of inventorship that you believe would be an appropriate international standard.

As a reference point, a definition of U.S. inventorship is set forth below.

In the United States of America (U.S.) **35 U.S.C. 115** requires that the correct inventor(s) be named in a patent application. In addition, **35 U.S.C. 116** establishes guidelines for joint inventorship by stating that “Inventors may apply for a patent jointly 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, or (3) each did not make a contribution to the subject matter of every claim of the patent.” No statute identifies the definition of inventorship *per se*. Rather, the definition for inventorship is established by case law. **MPEP 2137.01** summarizes relevant case law. In general, the definition of inventorship can be simply stated: “The threshold question in determining inventorship is who conceived the invention. Unless a person contributes to the conception of the invention, he is not an inventor. . . . Insofar as defining an inventor is concerned, reduction to practice, *per se*, is irrelevant.” *Fiers v. Revel*, 984 F.2d 1164, 1168, 25 USPQ2d 1601, 1604-05 (Fed. Cir. 1993). “[T]here is no requirement that the inventor be the one to reduce the invention to practice so long as the reduction to practice was done on his behalf.” *In re DeBaun*, 687 F.2d 459, 463, 214 USPQ 933, 936 (CCPA 1982). However, “one who suggests an idea of a result to be accomplished, rather than the means of accomplishing it, is not a coinventor.” *Ex parte Smernoff*, 215 USPQ 545, 547 (Bd. App. 1982). In addition, “In arriving at . . . conception [the inventor] may consider and adopt ideas and materials derived from many sources [such as] a suggestion from an employee, or hired consultant . . . so long as he maintains intellectual domination of the work of making the invention down to the successful testing, selecting or rejecting as he goes . . . even if such suggestion [or material] proves to be the key that unlocks his problem.” *Morse v. Porter*, 155 USPQ 280, 283 (Bd. Pat. Inter. 1965).

It would be beneficial to establish uniformity in determining inventorship in order to ensure correct

indication of inventorship in the case of multinational inventions. A harmonised system could adopt the U.S. system of determining inventorship based on conception of what is claimed, which results in a fair and reasonable determination of inventorship. The harmonised system could also adopt a harmonised definition of conception, based on a mental concept of what is invented and claimed, and determined by corroborated evidence.

- 14) Please propose a standard for correction of inventorship after a patent application is filed, together with any requirements necessary to invoke this standard (e.g. intentional versus unintentional error) and any timing requirements (e.g. during pendency of the application).

Whenever in an application or issued patent ("Patent Asset") an individual who is not an inventor is named, or an inventor is not named, the Patent Asset will be corrected on the application of all Parties with proof of the facts and such other requirements as may be imposed. Parties comprise the individuals and Owners to be added or removed from the Patent Asset. With correction under this Section, omitting inventors or naming of individuals who are not inventors will not support a defense to an issued patent. This Section will not negative any defense to an issued patent under the doctrine of "unclean hands" (also known as "inequitable conduct") as may exist in the pertinent jurisdiction.

- 15) If you believe such a requirement is appropriate, please propose an international standard for first filing requirements that would take into account multinational inventions.

For applications involving multinational inventions i.e., involving conflicting first filing requirements of two or more countries and which do not come under the umbrella of technology for which the secrecy review seeks to prevent the filing thereof abroad (e.g., technology that includes national secrets or impacts national security), the involved countries shall allow filing in either country as the first filing through a joint filing mechanism wherein a filing in either country which identifies the countries in which first filing for such application is required is deemed to be filed in each affected country on the same day and considered as having been filed first in the respective country.

- 16) If you believe such a requirement is appropriate, please propose an international standard for secrecy review requirements that would take into account multinational inventions.

Harmonization in this area is very difficult as each sovereign country has a right to decide on the types of inventions it desires to keep secret. In addition, the industries in various countries can be quite different and varied and therefore, what makes sense in one country may not make sense in other countries. A country with a weapons/defense industry cannot impose its will on a country without such industry.

We did feel as if the "formalities" of secrecy review (filing requirements and foreign filing license) may have some opportunities for harmonization.

- 17) If you believe such a requirement is appropriate, please propose an international standard for obtaining a foreign filing license.

For applications which come under the umbrella of technology for which the secrecy review seeks to prevent the filing thereof abroad (e.g., technology that includes national secrets or impacts national security), an international standard may not be appropriate. For example, the fact that multi-national

joint inventors are sharing technology across borders (including electronically in all forms or where a non-citizen residing in a foreign country collaborates and shares potentially barred technology) may not be something that should be remedied by a universal international standard.

Should an international standard be deemed appropriate, however, any requirements for obtaining a foreign filing license should seek to balance competing interests in patent policy, such as national security interests versus the burden on parties involved in providing and obtaining a foreign filing license. For example, since the purpose of the submission for a foreign filing license differs from the patent application itself, at least because the submission is focused on allowing national security considerations and/or other concerns to be investigated rather than claiming subject matter, the submission should not require the same level of patent drafting craftsmanship as the patent application. Since any subject matter to be claimed has to be disclosed in the patent application, claims themselves (which can be time consuming to draft) should not be needed in the submission for obtaining a foreign filing license. Rather, a description of what is covered by the patent application, that may include illustrative drawings and/or any other relevant information or material(s) that would assist in the determination whether a foreign filing license should be granted, should be a sufficient submission. Such a submission would likely be less burdensome on the applicant to prepare, and thus could be prepared more quickly (e.g., in view of a pending disclosure) and/or less expensively. Similarly, such a submission would likely be examined in less time than a patent application drafted in legalese.

Where there are inventors from different countries and each of the inventors' respective countries require a foreign license, an international standard would allow load balancing to occur between the different patent offices. For example, under an international standard, one foreign filing license request that is acceptable to each/all of several involved patent offices could be prepared and filed in several countries. Approving the request by a first patent office may inform the decisions of other patent offices and/or may enable the other patent offices to allow the request automatically as a matter of deference.

18) Please propose an international standard for an ability to cure or repair an inadvertent failure to comply with a first filing requirement or a security review requirement.

A retroactive approval should be possible where:

1. the subject matter of the patent application does not come under the umbrella of technology for which the secrecy review seeks to prevent the filing thereof abroad (e.g., technology that includes national secrets or impacts national security); and
2. failing to comply was unintentional and occurred through error and without deceptive intent by the patent applicant. Implementation should be strict and require the submission of verified statements, declarations, affidavits or other means to submit evidence under oath from those with personal knowledge including copies of supportive documents demonstrating the truthfulness of the information contained therein.

19) Please propose any other standards relating to multinational inventions (excluding those related to inventor remuneration or ownership of the invention) that you feel would be appropriate.

If an incorrect indication of inventorship is made on a patent application, the consequences of this error vary from country to country. The issued patent may be held to be invalid or unenforceable in some jurisdictions but not in others. The error may be correctable in some countries, but not in others.

We would propose:

1. That a significant and growing part of subject matter protected by intellectual property in today's world is created within the framework of multinational jurisdictions encompassing collaborative

- research projects having multiple inventors domiciled in multiple countries.
2. That the existence of considerable differences between national laws concerning how to correct inventorship to intellectual property causes complications and problems for cross border R&D both within multinational enterprises and for cooperation between companies.
 3. That the correction of inventorship in pending patent applications and patent grants should be governed by harmonised rules since it affects their prosecution and their enforcement.
 4. That progress has been made towards establishing a unified approach for the public and stakeholders to access basic patent file information known as the Global Dossier.
 5. That the corrective procedure rules should initially at least provide for correction of inventorship before an administrative agency, generally this will be a national/regional patent office, and that the rules should provide for uniform data fields, at least in part, that allow for an automated process to initiate changes across multiple counterpart patent assets with an ultimate goal to have a centralized automated approach to correct inventorship in multiple jurisdictions in a simple and cost effective way. [Harmonisation in determination of inventorship will make this goal more achievable.]

Summary

In the U.S., a key to inventorship is “conception”—contribution to the subject matter in the claims. Caselaw provides guidance on the level of contribution to the conception of an invention necessary to be named an inventor. A harmonised system should determine inventorship based on conception of what is claimed. Conception should be based on a mental concept of what is invented and claimed, and determined by corroborated evidence.

In the U.S., pending patent applications must be rejected where inventorship errors are identified. But the USPTO does not determine or question inventorship during prosecution. Issued U.S. patents can be held invalid for an error in stated inventorship, but can be corrected, even during litigation. A harmonised system should allow correction of inventorship of applications or issued patents, and should not negate any defense in litigation under the doctrine of “unclean hands.”

The U.S. does not have a first filing requirement, but does require foreign filing licenses, and a secrecy review process. Secrecy review requirements depend on the exigencies of each country, making harmonisation difficult and likely undesirable. For applications involving technologies that do not implicate a secrecy review requirement, a harmonised system should regard filing through a joint filing mechanism as the first filing in each respective country. Where inventors are from different countries, an approved foreign filing license request should inform the decisions of other patent offices. Inadvertent failure to comply with first filing requirements should be retroactively curable for applications that would not require secrecy review.

Please comment on any additional issues concerning the multinational inventions you consider relevant to this Working Question.