Group B+ Conflicting Applications Work Stream:
Options for Harmonization of the Treatment of Conflicting Applications

Members of the Work Stream:
Canada, the European Patent Office, Japan, Korea, Sweden, and the United Kingdom

This document has been approved by the member delegations of the Work Stream, who expressly reserve their positions with regard to the substance discussed therein.

Whilst some delegations are participating in this exercise under the understanding that “nothing is agreed until everything is agreed”, this view is not shared by all delegations.
I. Introduction

An important issue relevant to patent examination throughout the world is the scope of prior art applicable to the determination of the patentability of an invention. Generally speaking, the state of the art is defined as anything made available to the public in any way, anywhere in the world, prior to the priority or filing date of the application. However, an issue arises when an earlier-filed application, containing the same subject matter claimed in an application later filed in the same office, publishes after the filing date of the later-filed application. In such an instance, the two applications are said to “conflict” because the earlier-filed application does not become publicly available until its publication date (which is after the filing date of the later application), and therefore is not prior art—in the typical sense—against the subsequent application.

Without a rule to address this type of conflict, the result would be the issuance of two patents directed to the same, or substantially the same, subject matter. In order to address this issue, each patent system has adopted rules that give, upon publication, prior art effect to the earlier-filed application as of its filing or priority date. This legal fiction is commonly referred to as “secret prior art” (SPA) because the information is contained in a patent application that is publicly unavailable, but treated as prior art nonetheless. (In this paper, the terms “conflicting applications,” “secret prior art,” and “SPA” are used interchangeably.)

A related issue arises if both applications in question were filed by the same applicant. The adoption of rules governing secret prior art could inadvertently lead to “self-collision”—that is, a situation where one of the applicant’s own patent applications is used to refuse another, later-filed application—unless a measure for avoiding self-collision (“anti-self collision”) is also provided.

While all patent systems have laws and practices addressing to what extent “secret prior art” qualifies as prior art and whether an applicant’s own application can be used to refuse another, there are substantial variations among jurisdictions as to its application and effect. Please see the “Conflicting Applications Work Stream: Study on Usage of Secret Prior Art in Patentability Determinations” for a detailed description of the treatment of conflicting applications in select Group B+ jurisdictions. In addition, for several years Group B+ and the Tegernsee Group have been analyzing this issue and the various approaches taken by national patent offices to address it, with a view to developing a harmonized approach.
In 2015, the B+ Sub-Group on Patent Harmonization issued an “Objectives and Principles” paper\(^1\) (B+/SG/2/10) that identifies, among other things, the following agreed principles regarding conflicting applications:

(i) The grant of multiple patents for the same invention in the same jurisdiction should be prevented;

(ii) The patent system should allow for the protection of incremental inventions while ensuring that patent rights are not unjustifiably extended;

(iii) Any system which allows incremental inventions to be patented should:

   (a) balance the interests of inventors to protect incremental improvements on their own inventions with the interests of third parties to operate in the same field; and,

   (b) promote innovation and competition.

The “Objectives and Principles” paper further identifies related issues for which there is a consensus view. Of particular relevance here, the B+ Sub-Group recommended that “[f]urther work should be conducted to compare various alternative approaches, bearing in mind the effects on innovation and competition.” This paper follows that recommendation, and builds on prior work by presenting potential options for harmonization of the treatment of conflicting applications.

II. Study on Usage of Secret Prior Art in Patentability Determinations

As mentioned above, the Group B+ Harmonization Subgroup conducted a study on the usage of secret prior art in patentability determinations. This study aimed to provide empirical data on the frequency by which secret prior art is utilized in rejections as a way to inform consideration of various options for harmonization. Abbreviated results are included here to serve as a tool to better understand the impact of any proposed changes.

Table 1: Frequency of Citation of Secret Prior Art by Office, in 2015

<table>
<thead>
<tr>
<th>Technology</th>
<th>CIPO ²</th>
<th>EPO</th>
<th>JPO</th>
<th>KIPO</th>
<th>UKIPO</th>
<th>USPTO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Novelty</td>
<td>Novelty</td>
<td>Novelty</td>
<td>Novelty</td>
<td>Novelty</td>
<td>Novelty</td>
</tr>
<tr>
<td>Biotechnology and Chemistry</td>
<td>0.80%</td>
<td>6.0%</td>
<td>2.00%</td>
<td>0.29%</td>
<td>4.50%</td>
<td>0%</td>
</tr>
<tr>
<td>Electrical</td>
<td>0.00%</td>
<td>2.50%</td>
<td>5.00%</td>
<td>0.19%</td>
<td>5.00%</td>
<td>5%</td>
</tr>
<tr>
<td>Mechanical</td>
<td>1.07%</td>
<td>3.0%</td>
<td>2.50%</td>
<td>0.20%</td>
<td>3.50%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Total (Avg. %)</td>
<td>0.64%</td>
<td>3.83%</td>
<td>3.33%</td>
<td>0.22%</td>
<td>4.33%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Table 1 reveals that the frequency of citation of secret prior art for novelty purposes, irrespective of the technology or office, ranges from 0% on the low end to as high as 6.0%, with an average of 2.45%. While these percentages are somewhat low in absolute terms, they tell a rather different story when scaled in relative terms.

When contemplating options for harmonized treatment of conflicting applications, it is important to consider the impact of USPTO refusals based on SPA for determination of obviousness. In Biotechnology and Chemistry, SPA is used to refuse applications for lack of inventive step in 2.5% of cases, in Electrical: 13% of cases, and in Mechanical: 7% of cases. These numbers are not insignificant and raise the question as to what the effect of a change of practice may be.

Conversely, it would be important to consider the impact of anti-self-collision in the jurisdictions which have it. The results of the Study carried out indicate that at the EPO and the UK IPO, instances of self-collision form 56.5% and 23.1% of citations of secret prior art respectively. If similar rates exist in the jurisdictions which have anti-self-collision, the impact of these clauses on the system would need to be further investigated.

² The results below only take into account objections under 28.2(1)(c) or (d) of the Canadian Patent Act.
III. Industry Input

a. Tegernsee survey

In early 2014, the Tegernsee Experts Group—representing the heads of offices of and experts from the USPTO, the Japan Patent Office (JPO), the European Patent Office (EPO), and the patent offices of Denmark, France, Germany and the United Kingdom—conducted a survey to solicit stakeholder views on issues related to substantive patent law harmonization. With respect to conflicting applications, the data collected suggested that for roughly 79 percent of applicants in all jurisdictions, the rate of occurrence of conflicting applications is less than 1 in 100 applications. Although the survey suggested that conflicting applications do not frequently arise, 83 to 90 percent of respondents considered the harmonization of rules governing the treatment of conflicting applications to be either “critical” or “important.”

When asked which approach (EPC, JP, US) they preferred, most respondents to the Tegernsee survey expressed a preference for their own system, with 77 percent of respondents to the Japanese survey, 65 percent of respondents to the European survey, and 58 percent of US-based respondents to the US survey considering their own system to reflect best practice.

b. Industry Trilateral paper

In addition to the expansive user input gathered through the Tegernsee survey, a more focused approach has recently begun. Since 2014, the Industry Trilateral—a group consisting of the American Intellectual Property Law Association, BusinessEurope, the Intellectual Property Owners Association, and the Japan Intellectual Property Association—has been engaged in discussions on policy and elements for a possible substantive harmonization package. Industry Trilateral’s aim is to achieve consensus on the issues and sub-issues to be contained in such a package, determine where there is agreement in principle, and identify where further discussion is required.

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4 Ibid., pp. 54–55. The Tegernsee survey is not a scientific study, and cannot purport to present statistically significant evidence based on properly selected, representative samples of appropriately sized, comparable user groups. Because of this, the data collected must be treated with caution, and the report can only purport to highlight trends based on the responses to the questionnaire.

5 Ibid., pp. 67–68. A high number of non-U.S.-based respondents participated in the USPTO survey. Roughly half of the respondents who preferred either the European or the Japanese approach were not U.S.-based respondents. Adjusting the U.S. figures accordingly, the level of U.S. respondent flexibility in preferring a foreign system can be seen to be of the same order of magnitude as that exhibited by European and Japanese respondents in their own regional/national surveys (p. 68).
As evidenced in a paper published by Industry Trilateral in May 2015, conflicting applications remains one of the most difficult issues for the group to resolve. Thus far, they have reached no agreement on particular elements relating to the best approach for the treatment of conflicting applications. The Industry Trilateral has, however, agreed that a harmonized approach with respect to the applicability of secret prior art should rely on traditional, internationally recognized patent law concepts.

IV. Options for Harmonization of the Treatment of Conflicting Applications

a. Use of secret prior art in patentability determinations

The primary issue when considering a harmonized approach for the treatment of conflicting applications is how the secret prior art should be applied with respect to the later-filed application. The sections that follow provide descriptions of a number of options to address this subject, beginning with practices currently in place in some jurisdictions and then exploring other, alternative approaches.

Option 1: Novelty Only

With the novelty-only approach, conflicting applications are relevant for the examination of novelty only. Novelty is applied on the basis of the whole contents approach in an objective manner: it includes matter implicit from the disclosure, which would be immediately apparent to a person skilled in the art, but excludes equivalents or variations.

Some users point out that this approach is clear, simple to understand, and easy to apply. In addition, while it prevents double patenting (because of the arguably narrow definition of novelty applied, which excludes equivalents), it allows the first applicant broad latitude to fill out the scope of protection for the invention originally filed, based on subsequent incremental innovation.

However, others argue that this approach may result in patents being granted on closely related inventions, at times resulting in third parties needing licenses from multiple, independent patentees to be able to use the invention, rendering exploitation of the inventions more complex for all parties involved. Opponents further argue that this approach allows the first applicant to extend his or her overall time of protection by filing subsequent applications on minor modifications, obvious variants, and equivalents.

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Option 2: Enlarged Novelty

Another approach treats conflicting applications as prior art on the basis of enlarged novelty. An examination of Japanese patent law will aid in understanding what is meant by enlarged novelty. Under Article 29bis of the Japan Patent Act, no patent shall be granted for an invention claimed in a patent application which is identical to an invention disclosed in a previous application. The term “identical” includes cases where there is no difference between the elements defining the invention as well as where there is only a “minor” difference between these elements—that is, they are “substantially identical.” If there is a minor difference in the embodiments of the means for solving the problem, which is an addition, deletion, or conversion of “well-known arts” and does not bring any new technical effects, the two inventions are deemed to be “substantially identical.” The concept of “substantially identical” may also include equivalents, if they would be easily understood by a person skilled in the art.

For example, a claimed invention would be considered substantially identical to the matter disclosed in the secret prior art where, although the claimed invention is different from the matter disclosed in the secret prior art, the difference identified is a minor one which is an addition, deletion, or conversion of “well-known arts” and does not bring any new technical effects.

As discussed in more detail in the “Conflicting Applications Work Stream: Study on Usage of Secret Prior Art in Patentability Determinations,” the practice in South Korea is similar to that of Japan. There, “substantially identical” or “substantially the same” refers to the case where non-fundamental matters (secondary matters), not the main technical ideas of the invention are different between the subject matter of the claimed invention and the subject matter of the prior art, such as mere differences in expression, recognition of effects, purposes or use as well as trivial change in embodiment or limitation of use, etc.

Proponents of this approach believe that “enlarged novelty” offers a possible compromise, given that it lies between the novelty-only approach existing in Europe and the novelty-plus-inventive-step approach practiced in the United States. However, opponents worry that such an approach as defined above offers little predictability, and therefore introduces legal uncertainty.

Option 3: Novelty plus Inventive Step (Non-Obviousness)

Another possible approach is for conflicting applications to be relevant, not only for the examination of novelty, but also inventive step. In practice, this approach allows the first application to be combined with other references, including other co-pending applications in the assessment of inventive step. Therefore, inventions contained in later applications must meet the full patentability requirements of novelty and non-obviousness over the earlier conflicting application.
This approach is best demonstrated by the United States’ treatment of conflicting applications. There, in addition to novelty, the prior art effect of secret prior art also extends to obviousness. As such, conflicting applications may be considered by themselves or in combination with other items of “prior art” (including other conflicting applications) for purposes of determining whether an invention in a later-filed application would have been obvious.

The section of U.S. law that governs obviousness, 35 U.S.C. § 103, provides that a patent for a claimed invention may not be obtained if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.

Because all the subject matter that is prior art under Section 102 can be used for obvious determinations under Section 103, the prior art effect of conflicting applications is the same for determining lack of novelty and obviousness.

Because of this, an examiner is able to apply prior art against an application for purposes of a lack of novelty or obviousness rejection even if the prior art reference was not published at the time the application under examination was filed. This policy is intended to encourage applicants to bring subject matter to the public’s attention as quickly as possible by filing as early as possible. Second filers should not benefit from delaying their applications, and are therefore subject to the same evidence and disclosures required of those who have filed first and subsequently published.

Those who favor this approach argue that applying the prior art effect of earlier applications for both novelty and inventive step is a way to prevent the proliferation of overlapping patents held by multiple parties. Another argument in its favor is that, from a first-inventor-to-file perspective, the earlier applicant has taken the necessary steps to communicate the invention in a timely manner to the public and therefore should be able to rely on the filing of that application to prevent any later applicant from obtaining a patent for an obvious variation.

Opponents of this approach argue that relying on a conflicting application for purposes of determining inventive step takes the legal fiction of secret prior art beyond what is reasonable, as it requires applicants to be inventive in relation to something which could not be known to them, particularly, for example, where a technical problem could only be found in an unpublished application. Moreover, it is considered to unduly favor the first applicant past the post, potentially giving him preferential treatment for incremental improvements which may not have been contemplated at the time of the original filing.
**Option 4: Novelty plus Single Reference Obviousness (No-Mosaic)**

Given the argued drawbacks with current approaches, discussions on harmonized treatment of conflicting applications have shifted to potential new options. One option is referred to as “no mosaic.” Conflicting applications would form part of the prior art for both novelty and inventive step, but the conflicting application could not be combined with another reference. Lack of inventive step would have to exist on the basis of the disclosure contained in that single document.

This approach would allow greater latitude for applicants to obtain patents for variants which may be considered obvious if prior art documents were allowed to be combined, while limiting the issuance of patents on closely related inventions. Though it could be argued that this approach would be unfair to applicants, since it may extend the legal fiction of secret prior art too far (as explained above, in Option 3).

**Option 5: Mixed Approach**

Another approach that has been discussed is a US/EPO mixed approach. When the conflicting applications are held by different parties, the US approach would apply—that is, the earlier application would form part of the prior art for both novelty and inventive step for the later-filed application. Thus, applications filed later by third parties would have to fulfill full patentability requirements over the earlier application for a patent to be granted.

Where the two applications are held by the same applicant, however, the EPO approach would apply, so that the prior application would be relevant to the determination of novelty only, as applied by the EPO. An applicant’s own application secret prior art could be used to form the basis of the rejection.

This approach, a combination of two opposite approaches, aims to increase the separation between patents held by different parties, thus avoiding the need for anti-self-collision. But it would still allow for comprehensive production of incremental innovation as appropriate, and avoid the introduction of new concepts that might promote legal uncertainty.

However, a combination of two systems is still subject to many of the criticisms of the single systems described above. Opponents would argue that allowing secret prior art to be combined for purposes of examining inventive step would be an unreasonable extension of the legal fiction afforded to it. As described below in more detail, others would argue that all applicants should be treated equally.

**b. Use of an applicant’s own work in patentability determinations**

In addition to how secret prior art should be used in patentability determinations, another issue for consideration in devising a harmonized approach to the treatment of conflicting applications is whether an applicant’s own prior-filed, later-published application should be used against a
subsequent application by the same applicant, a situation referred to as “self-collision.” Many jurisdictions provide for anti-self-collision—that is, an applicant’s own work will not be treated as if it were prior art in the examination of the second-filed application.

Those in favor of anti-self-collision believe it is particularly necessary in a first-to-file context where the applicant must rush to the patent office, thereby providing a safe harbor to file additional applications to protect incremental improvements and thus obtaining meaningful, complete protection for the invention for which the application was originally filed.

Others argue that the patent system should treat all applicants equally, that is, not provide for anti-self-collision. Instead, they propose that the initial determination of the effect of secret prior art should allow for an appropriate distance between the first applicant and subsequent third-party applicants, such that the first applicant is given full latitude to obtain protection for incremental invention as disclosed in the first application filed.

Related to anti-self-collision are terminal disclaimers. In the United States, an applicant may overcome a double-patenting rejection by filing a terminal disclaimer, which prevents patents on close subject matter from being held in different hands. From the perspective of third parties, terminal disclaimers facilitate both licensing and litigation. In addition, terminal disclaimers also ensure that any resulting patents will expire upon the date at which the first-filed patent expires, thus preventing undue extension of the patent term.

Option 1: No anti-self-collision

As described above, this option would allow an applicant’s or inventor’s own prior-filed, later-published application to be used against a subsequent application by the same applicant.

Those in favor of this approach believe that all applications should be treated equally, so that the effect of a prior application on a subsequent application should be the same, independent of whether both applications are held by the same person or not. In their view, there is no good policy reason to favor the first applicant over subsequent applicants. They argue that subsequent applicants have no knowledge of the earlier application and, in practice, will be simultaneous, independent inventors.

Opponents of this approach believe that innovation and competition are best supported by allowing the first applicant to enjoy the full scope of the invention and disclosure with respect to incremental developments of his or her own invention. This prevents their own applications from being cited against them, while including them in the applicable secret prior art for all other applicants. In addition, this approach concentrates ownership of patentably indistinct inventions in fewer hands.
Option 2: Anti-self-collision

The anti-self-collision option generally provides that an applicant’s or inventor’s own prior-filed, later-published application will not be used as secret prior art against a subsequent application by the same applicant.

Proponents of this approach argue that anti-self-collision rewards the first applicant with the opportunity to enjoy the full scope of the invention and disclosure by permitting incremental developments of his or her own invention, while protecting against other applicants. Those in favor of the no-anti-self-collision approach, on the other hand, believe that all applicants should be treated equally.

Option 3: Anti-self-collision, but self-collision in double patenting

A third option— anti-self-collision, but self-collision in double patenting—prevents an applicant’s own prior-filed, later-published application from being used as secret prior art against a subsequent application by the same applicant. However, if the later claims are not patentably distinct from the earlier claims, the applicant’s previously filed application can be used against the subsequent application. This option could also be slightly altered such that a whole contents approach is applied.

Those in favor of this option argue that the first applicant is rewarded with the opportunity to fill out his application, while also preventing multiple patents from being granted on the same subject matter. Opponents of anti-self-collision would express the same arguments against this option as those used against the other options described above.

Option 4: Anti-self-collision provision with terminal disclaimer

A fourth option provides for anti-self-collision: that is, an applicant’s own prior-filed, later-published application will not be used as secret prior art against a subsequent application by the same applicant. However, where the subject matter of the conflicting applications is patentably indistinct, the applicant would be required to file a terminal disclaimer. The terminal disclaimer would serve to link the two patents, thereby preventing undue extension of the patent term and also facilitating licensing and litigation.

Those in favor of this option argue that the first applicant is rewarded with the opportunity to fill out his or her application, while the terminal disclaimer takes third-party interests into account. Opponents of anti-self-collision would express the same arguments against this option as against those described above.
c. Combined Options

Numerous options with respect to the prior art effect of conflicting applications and treatment of an applicant’s own work presents a multitude of potential methods for the treatment of conflicting applications. The differences among these approaches are plotted in Figure 1, which compares the difference of treatment between first applicant and subsequent applicants (x axis) and the distance between patents, i.e. granted claims, held by different parties (y axis) and Figure 2, which compares the different of treatment between first applicant and subsequent applicants (x axis) and the distance between patents held by the same party (y axis).

Figure 1: Differing Outcomes of Six Different Approaches for the Treatment of Conflicting Applications with Respect to Patents Held by Different Parties

* Difference of treatment between first applicant and subsequent applicants depends on whether or not the first applicant and the second are the same entity.
d. Related Issue: Treatment of PCT Applications

In addition to the matters discussed above, a related issue is how the earlier-filed application should be treated if it is a Patent Cooperation Treaty (PCT) application. Here again there are differences based on jurisdiction. In Europe, PCT applications become secret prior art as of their international filing or priority date, but only if they enter the respective national/regional phase, which entails that they have been translated into the prescribed language, facilitating the work of examiners, but also circumscribing the pool of secret prior art to that which is necessary to avoid double patenting. This is also the case in Japan and South Korea for PCT applications filed in a foreign language. In the US, however, since the AIA, a PCT application designating the US enters the prior art as of its international filing or priority date, provided it has been published.

Option 1: Treatment as prior art as of the earlier of the PCT filing date or priority date in all offices for which there is an active designation at the time of publication of the PCT application.

One option provides that an earlier filed PCT application should be treated as prior art in all offices for which there is an active designation at the time of publication of the PCT application as of the earlier of the PCT filing date or priority date.
Those in favor of this approach argue that PCT applications should be treated the same as other applications. While opponents of this approach argue that double patenting issues do not arise unless the PCT application enters the national/regional phase.

Option 2: Treatment as prior art as of the earlier of the PCT filing date or the priority date only in the offices in which the PCT application undergoes national/regional entry.

A second option provides that an earlier filed PCT application should be treated as prior art only in the offices in which the PCT application undergoes national/regional entry as of the earlier of the PCT filing date or the priority date.

Proponents of this approach would argue that the double patenting issue does not arise if a PCT application does not enter the national/regional phase in the country involved. In addition, some consider it necessary for the PCT application to be treated as prior art only in the offices in which the PCT application undergoes national/regional entry, due to a concern that PCT applications should not have a broad effect compared to Paris-route filings.

An additional advantage of this approach is that the PCT application becomes part of the secret prior art at a date at which the translation of the application into an official language is available to the patent office, thereby removing issues for applicants and offices caused by foreign-language PCT applications.

Opponents of this approach argue that PCT applications should be treated the same as national/regional applications and, as such, should have prior art effect in all countries for which the application has active designations as of the publication date.

V. Proposals for further consideration

In order to advance discussions on a harmonized approach to the treatment of conflicting applications, the following proposals should be further explored:

Use of secret prior art in patentability determinations:

Chair’s Proposal 1: “Novelty plus no-mosaic inventive step”

Secret prior art should be relevant for purposes of novelty and inventive step. However, multiple references should not be combined in order to support the inventive step rejection (no-mosaic). Further, applications by the same applicant should not have prior art effect against their later applications (anti-self collision applies). In order to take third party interests into account, jurisdictions may require terminal disclaimers.⁷

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⁷ For the purposes of protecting third party interests, a prohibition against double patenting could work as an alternative or in combination with terminal disclaimers.
Chair’s Proposal 2: “Enhanced novelty with defined tests”

Secret prior art should be relevant for the purpose of enhanced novelty, whereby the scope of the concept should be more clearly defined. Additional work on refining the applicable tests would be needed, but the concept would encompass at least matter implicit from the disclosure which would be apparent to a person skilled in the art as well as equivalents. Whether anti-self-collision would be required would also need to be investigated.

Treatment of PCT Applications:

Chair’s Proposal:

PCT applications should be treated as prior art as of the earlier of the PCT filing date or priority date in all offices for which there is an active designation at the time of publication of the PCT application.

Given the varying practices and considerations associated with the prevention of double patenting, protection of incremental innovation, and equal treatment of applicants, the Chair believes these approaches may represent a balanced way forward. Our understanding is that approaches 1 and 2 are under careful consideration by stakeholders as potential options for harmonization. It should be emphasized that such further work does not preclude the consideration of other possible options.

One issue that has arisen during the course of discussions on this topic is to what extent is deep harmonization of the treatment of conflicting applications necessary? While a fully harmonized standard is ideal, the difficulties of such task should be recognized. Some delegations query whether perhaps a more flexible standard is worth exploring as an alternative, more achievable solution than deep harmonization, so long as this approach still facilitates enhanced work sharing, whilst others believe that at this time, the focus of efforts should remain the pursuit of a truly harmonised approach.

VI. Conclusion

As its members consider ways to make progress on substantive patent law harmonization, treatment of conflicting applications is arguably the most technical and difficult issue facing Group B+. While the options discussed here seem rather binary, several policy issues arose in the course of the discussions that led to their formulation, including the prevention of double patenting, the protection of incremental innovation, and whether or not applicants should be treated equally. As Group B+ becomes more flexible and moves away from long-held positions, these considerations and their impact on the patent system must be carefully weighed.