



**Facilitating cooperation between Patent Offices and helping users:
proposal for harmonisation of claim formats**

Introduction

The IP Federation represents the views of a significant number of major innovative UK companies in matters concerning intellectual property policy. A list of members is attached. Not only do our companies own considerable numbers of IP rights, both in Europe and internationally, but they are affected by the activities and IP rights of competitors. They may be either plaintiffs or defendants in IP related court actions.

This note sets out present barriers to efficient, mutually-collaborative work by Patent Offices which are essentially formal in nature, together with the Federation's proposals for eliminating those barriers. The Federation proposals would in addition eliminate cost and trouble for applicants and potential infringers.

For the sake of definiteness, we will illustrate the Federation's case by reference to inventions which are patented *via* the Patent Cooperation Treaty (PCT) with subsequent US national and European regional phases. This route is chosen for illustration because it is very popular with applicants, but similar problems will arise in the Paris Convention and the Patent Prosecution Highway (PPH) routes.

Four barriers and proposals for their elimination

Barrier 1

Rule 43(1) of the European Patent Convention (EPC) requires two-part ("characterised in that") main claim form "wherever appropriate", but a well-advised applicant avoids this form in the USA, and probably also in the PCT application.

The Federation recommends that EPC Rule 43(1) should be amended so that the US "list the integers" claim form should be acceptable to the EPO in all cases.¹

Illustrative Example

The prior art which is the closest (in the opinion of the EPO Examiner) discloses an X having A + B + C.

¹ Applicants at the EPO would be free to continue using two-part form if they wished.

The invention is an X with A + B' + C' + (D linking A and C' in some fashion), where B' and C' are, respectively, subsets of B and C.

A US main claim would read simply:

An X which comprises an A, a B', a C', and a D [linking] A and C'.

EPC Rule 43(1) would have the two-part form:

An X which comprises an A, a B, and a C, characterised in that the B is a B', the C is a C', and that the X includes a D [linking] A and C'.

Comment on the Example

The Rule 43(1) two-part claim is longer and can be quite hard to interpret and to correlate with a US "list the integers" form. Even skilled patent attorneys or Examiners may have difficulty, especially with a complicated chemical engineering or systems invention. The change of form consumes attorney time (for which the applicant pays), and also the time of EPO or US Examiners wishing to take advantage of each other's work. The lay potential infringer has also strong grounds to object to the form; the phrase "characterised in that" is pure "patentese" (being unused in any other context), and may mislead him.

The only function of the Rule 43(1) two-part form is to record the EPO Examiner's thoughts on the problem-and-solution approach based on the what he considers is the closest prior art. Such thoughts can be perfectly well recorded on the file, rather than in the claim. Furthermore, such thoughts may prove to be quite irrelevant in later EPO opposition and national revocation proceedings if a Board of Appeal or national Court chooses not to follow the particular "problem-and-solution" approach previously adopted by the Examiner, *e.g.* because closer prior art is advanced in the proceedings.

The above recommendation follows.

Barrier 2

A well-advised applicant will have in the PCT text EPC-type claim dependencies, *in which every claim depends on every previous claim to the extent this is logically permissible*. If he does not do this, he runs risks on later amendment in the EPO (which is very strict on "added matter") or an EPC State's national Court. However, claim dependencies in the USA are limited by 35 USC 112, which states: "A multiple dependent claim shall not serve as a basis for any other multiple dependent claim."

The Federation recommends deletion of this sentence from the US statute. In order for this have practical effect, the fee for a multiple-dependent claim would need to be the same as for a singly-dependent claim, or only slightly greater (in particular, without any "multiplying up" of dependencies).

Illustrative Example

The PCT claims read as follows:-

- [PCT] Claim 1. **A Y which comprises an E, an F, and a G.**
- [PCT] Claim 2. **A Y according to claim 1, wherein the E is an E'.**
[E' being a subset of E.]
- [PCT] Claim 3. **A Y according to claim 1 or claim 2, wherein the F is an F'.**
[F' being a subset of F.]
- [PCT] Claim 4. **A Y according to any one of claims 1 to 3, wherein the G is a G'.**
[G' being a subset of G.]
- [PCT] Claim 5. **A Y according to any one of claims 1 to 4, which includes an M.**

In the European Regional Phase, the scheme of the claim dependencies need not be, and advisedly ought not to be, changed. These repeated multiple dependences guard against the possibility that prior art is advanced that makes the combination of (say) claims 1, 3, and 4 necessary to ensure that there is a valid and infringed claim, with claims 2 and 5 being made dependent on the new combined claim. The scheme of dependencies makes all such combinations free of any added matter objection from the EPO or the national Court.

A truly equivalent set of US claims is the following because of the restriction on multiple dependencies in 35 USC 112:-

- [US] Claim 1. **A Y which comprises an E, an F, and a G.**
[As PCT claim 1.]
- [US] Claim 2. **A Y according to claim 1, wherein the E is an E'.**
[As PCT claim 2.]
- [US] Claim 3. **A Y according to claim 1 or claim 2, wherein the F is an F'.**
[As PCT claim 3.]
- [US] Claim 4. **A Y according to claims 1 or claim 2, wherein the G is a G'.**
- [US] Claim 5. **A Y according to claim 3, wherein the G is a G'.**
- [US] Claim 6. **A Y according to claim 1 or claim 2, which includes an M.**
- [US] Claim 7. **A Y according to claim 3, which includes an M.**
- [US] Claim 8. **A Y according to claim 4, which includes an M.**
- [US] Claim 9. **A Y according to claim 5, which includes an M.**

Comment on the Example

We immediately see that the US Rule requires 9 claims instead of 5 if the content of the five PCT claims are to be preserved. (For 10 PCT claims each dependent on all previous claims, the equivalent set of US claims would number 257!). In practice, applicants avoid large claim fees by being selective in deciding which US claims they file; but, regardless of what the

applicant chooses to do, one-to-one correspondence of the US claims with the PCT claims in content and/or numbering must cease in all claims beyond PCT claim 3.

The change of form consumes attorney time (for which the applicant pays), and also the time of EPO or US Examiners wishing to take advantage of each other's work. The lay potential infringer also has grounds to object to the consequences of the US requirement; he may not realise that in the Example the PCT set of 5 claims the US set of 9 are equivalent (the differences being purely formal), and in any case he has to do extra careful work to understand the relationship between the EP and US patents.

Barrier 3

Under Rule EPC 43(7), the European claims wherever appropriate have reference signs which "may not be construed as limiting the claim". But a well-advised applicant will avoid these references in the US claims, for there is no similar US provision relating to the construction of claims with reference numerals.

*The Federation recommends that the EPC Rule 43(7) should no longer require reference signs in the claims.*²

Comment

The discrepancy between the US and the EPC claims is extra work for the attorney (and therefore cost for the applicant). Also, a US Examiner unaware of the EPC Rule on construction may be misled into thinking that an EPO Examiner's work is not reusable by him because the European claims are narrower. This is especially likely in the case where there is more than one embodiment and, as is the practice, only the reference signs of one embodiment are included in the claim. Likewise, the lay potential infringer may be misled by the reference signs into thinking the claim is narrower than it is, and may incorrectly disregard the possibility of infringement.

The reference signs are primarily a mechanism to show that the Examiner has satisfied himself that the claim is supported by at least one embodiment. This mental process of the Examiner could just as well be recorded in the file.

The above recommendation follows.

Barrier 4

35 USC 112, as interpreted by the US Federal Circuit, allows only (i) independent claims and (ii) claims which, in referring back to previous claims, "incorporate by reference all the limitations of" the respective

² In principle, applicants at the EPO could be left with the option of including reference numerals if they wished, in which case the provision on construction would have to be retained.

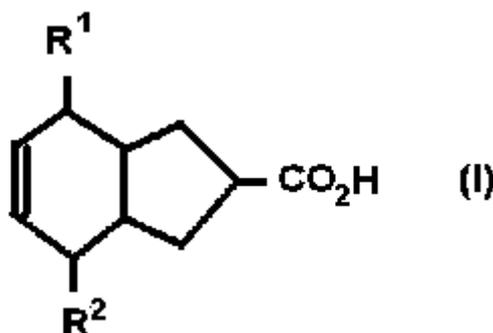
previous claims.³ This means that “modification claims” are not possible, *i.e.* claims that have a scope outside the scope of the claims to which they refer. In PCT/Europe modification claims can be used very efficiently for all concerned, especially in chemical cases (though not exclusively).

The Federation recommends amendment of 35 USC 112 so that the bar disappears. To preserve US Office fee income, the fee for a first modification claim should be the same as for an independent claim.

Illustrative Example

The PCT claims read as follows:-

[PCT] Claim 1. A monocarboxylic acid of the general formula (I),⁴



wherein R¹ represents an alkyl group and R² represents an aryl group.

[PCT] Claim 2. A compound according to claim 1, wherein the alkyl group represented by R¹ is an ethyl group.

[PCT] Claim 3. A compound according to claim 1 or claim 2, wherein the aryl group represented by R² is a phenyl group.

[PCT] Claim 4. The sodium salt of a monocarboxylic acid according to any one of claims 1 to 3.

In the European regional phase, the same scheme may be adopted. In USA, however, claim 4 is impermissible because the sodium salt has CO₂Na instead of CO₂H in the same place in the molecule. An equivalent set of US claims would be as follows:

[US] Claim 1. [As PCT claim 1.]

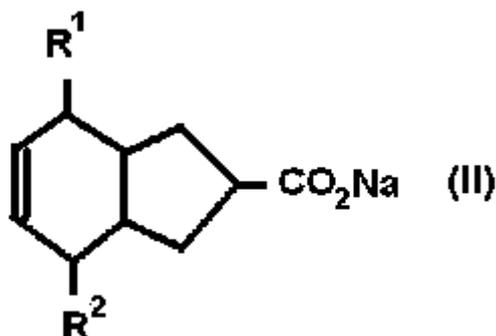
[US] Claim 2. [As PCT claim 2.]

[US] Claim 3. [As PCT claim 3.]

³ In *Pfizer Inc. vs Ranbaxy Laboratories Ltd*, No 06-1179 (Fed. Cir. Aug 2, 2006), the bar was enforced, even though the Court acknowledged that it was purely formal in character.

⁴ This invention is imaginary. The single CO₂H makes (I) a monocarboxylic acid, by definition.

- [US] Claim 4. A sodium salt of a monocarboxylic acid, which salt is of the general formula (II),



wherein R¹ represents an alkyl group and R² represents an aryl group.

- [US] Claim 5. A compound according to claim 4, wherein the alkyl group represented by R¹ is an ethyl group.
- [US] Claim 6. A compound according to claim 4 or claim 5, wherein the aryl group represented by R² is a phenyl group.

Comment on the Example

The greater number of the US claims, and the loss in USA of the immediate clarity of PCT claim 4, are self-evident. The extra expenditure of time by the attorney, the Examiner, and potential infringers is likewise self-evident. The fact that in the Court case referred to in footnote 3 an Examiner had "let through" a claim similar to PCT claim 4 above indicate how convenient the PCT form is, viewed substantively.

The above recommendation follows.

Other Offices

Generally, the above liberalisations of the EPC and US provisions on claim form would improve alignment with other Offices such as the Japanese and Australian, and would set a benchmark for international formal harmonisation.

Conclusion

Purely formal alignment of the law and rules relating to claim form between EPC and USA, in the manner proposed above, would facilitate the use by the Examiners at the EPO and the USPTO of each other's work, and generally be of benefit to other Offices. In addition, it would save applicants money and make patents easier for potential infringers to assess. The alignment would require changes in the US Statute and the EPC Rules, but would not involve any issues of substantive law, and therefore should not be contentious.

IP Federation
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IP Federation members 2013

The IP Federation represents the views of UK industry in both IPR policy and practice matters within the EU, the UK and internationally. Its membership comprises the innovative and influential companies listed below. Its Council also includes representatives of the CBI, and its meetings are attended by IP specialists from three leading law firms. It is listed on the joint Transparency Register of the European Parliament and the Commission with identity No. 83549331760-12.

AGCO Ltd
ARM Ltd
AstraZeneca plc
Babcock International Ltd
BAE Systems plc
BP p.l.c.
British Telecommunications plc
British-American Tobacco Co Ltd
BTG plc
Caterpillar U.K. Ltd
Delphi Corp.
Dyson Technology Ltd
Element Six Ltd
Eli Lilly & Co Ltd
ExxonMobil Chemical Europe Inc
Ford of Europe
Fujitsu Services Ltd
GE Healthcare
GKN plc
GlaxoSmithKline plc
Hewlett-Packard Ltd
IBM UK Ltd
Infineum UK Ltd
Merck Sharp & Dohme Ltd
Microsoft Limited
Nokia UK Ltd
Nucletron Ltd
Pfizer Ltd
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