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March 4, 2002

Mr. Andre La Marche
Section Chief, Patents
The Canadian Intellectual Property Office
50 Victoria Street, 8th Floor
Hull, Quebec
K1A 0C9

Dear Mr. LaMarche:

RE: MOPOP Draft Guidelines for Computer-Related Inventions

I would like to thank you for requesting IPIC's comments on your proposed changes to the MOPOP. We commend CIPO's commitment in explicitly and extensively addressing the difficult legal issue presented to the patent system by inventions in the computer arts. We realize that this is not an easy task, particularly in light of the limited Canadian judicial guidance that is available.

As you are aware, consideration of this matter has been undertaken by IPIC's Information Technology Committee. I have pleasure in presenting their report herewith. We obtained considerable input from the profession and I think that this is evident from the report. We have some general observations for your consideration as follows.

1. One must consider how the new guidelines are likely to be used, and therefore their importance to CIPO, to applicants and to our profession. On the one hand, they may be used by certain applicants in deciding whether to invest in filing patent applications in Canada or whether to place that investment elsewhere. They will also be used by examiners to reject certain applications. It would be unfortunate if the combined effect were that patent applications for many inventions that might deservedly be patentable under the laws of Canada when articulated by a court, are either rejected or not filed based on the guidelines.

2. If accurate, provide a clear statement that it is not the intent of the Office to distinguish between applications for computer-related inventions and those in any other field and that the examination of such applications will be carried out under the same guidelines as any other patent application.

3. For each example of an unacceptable patentable claim, provide an example on how the claim could be converted to an acceptable claim.

4. Revisit the example claims and explain the issue at hand. Many of the comments address a number of areas of patentability, e.g. obviousness, novelty and subject matter. The issue at hand should be made clear.

5. Support your comments with regard to more decisions, for example: *Lawson*, *Motorola* and perhaps *Progressive Games*.

6. Please revisit your comments in section 16.06.03 regarding the patentability of a method of doing business in light of our comments.

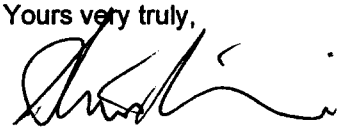
7. We submit that the fact that human intervention may be required in a step of a process does not render the process non-patentable. It is the nature of the intervention that needs to be considered.

8. Please reconsider your comments of computer programs as "descriptive material" in light of our comments.

8. The blanket statement that a claim that defines a computer program is not patentable (16.07.06) is of concern.

Please do not hesitate to contact IPIC should you have any questions regarding our comments. We would be pleased to invite the Information Technology Committee to continue to work with you on this and appreciate your initiative in asking for IPIC's comments.

Yours very truly,



Stuart Wilkinson
President,
Intellectual Property Institute of Canada

SW:dd
Encl.

cc. Mr. Peter Ebsen
Mr. David Tobin
Mr. Mark Schisler
Mr. Michèl Gerin, IPIC Office

General Comments

1. On the title page change "Invention" to "Inventions".

2. We understand from Peter Ebsen that the intent of CIPO is to delete sections: 16.04(e), 16.06, 16.07 and 16.08 and replace them with the proposed document. This sounds reasonable to us.

3. As the current title of Chapter 16 is *Utility and Non-Statutory Subject Matter* and the content will now be largely computer-related inventions, CIPO may wish to retain 16.01 to 16.04 under the current title. The computer related aspects may then form a separate chapter. Similarly 16.05 may be moved to Chapter 17 on Biotechnology.

4. With regard to example claims, a "before" and "after" presentation would be useful. It would be helpful to critique an example claim for its failure to address patentable subject matter and then suggest how it may be modified to overcome the failure. For example, consider providing an example of a claim for *Schlumberger* that the Patent Office would consider acceptable under the current guidelines.

5. With respect to the titles of the various sections a bit more consistency may be in order. For example, section 16.06.06 is titled "Resource Allocation - patentable and non-patentable claims" while section 16.06.07 has as its title "Resource Allocation - non-patentable claim". It may be preferable to group each type of patentable and non-patentable claims together.

6. We would suggest that all claim examples used be from your own design, from published Canadian applications, or from issued patents. Consider, however, the potential problem of commenting on the patentability of a claim in a published application, which has not yet been prosecuted.

7. The concept of referring to each claim by a unique number aids in avoiding confusing references. However, a reference to the appropriate section containing the claim would aid the reader in locating the claim. For example (from section 16.07.03); "... with method claim 6 (see section 16.07.01)."

8. For each example or section consider adding a preamble as per the previous section 16.06 in the current MOPOP. An example for proposed section 16.06.01 could be: "The computer-related court decision *Schlumberger Canada Ltd. v. Commissioner of Patents* has resulted in the Patent Office determining that the invention showed a lack of integration between computer-related matter with other patentable subject matter". A preamble will aid the reader in understanding the discussion that follows.

9. The current Chapter 16 of the MOPOP is titled "Utility and Non-Statutory Subject Matter". It appears that many of the example claims in the proposed draft address other areas such as novelty or obviousness. For an example of what we mean, please see comment "f)" with regard to section 16.06.04.

10. Consider adding a new section 16.07.10 discussing data structure claim examples as per the *in Re Lowry* U.S. case.

11. All example claims should be presented in a uniform style, e.g.

Example x
Claim y
a)
b) ...

We note that not all the claims are preceded by "Example" and that different numbering/lettering schemes are used for the components of a claim.

Section Specific Comments

12. **16.06.01**

a) When quoting the claim from *Schlumberger,* consider adding to the text the number of the claim.

b) A detailed description of why the *Schlumberger* claim would still be considered unacceptable would be useful. In particular, the paragraph following the claim states "The *Schlumberger* application did not fully describe...", which points to a defect in the description as opposed to the claim.

b) In the last paragraph describing the three rules, consider changing "the following rules". They are not rules per se but rather "guidelines".

c) In "rule" 3 it is stated "...if the computer-related matter has been integrated with another practical system that falls within an area which is traditionally patentable...". Explaining this comment in light of the *Motorola* decision would be helpful. It is not clear what the "practical system" is in the *Motorola* decision as it was an algorithm embedded in ROM. Further, this decision is not clear in light of *Schlumberger*. For example if you took away the ROM would you not be left with an algorithm that is not patentable subject matter? The comparison of *Schlumberger* and *Motorola* leave one questioning what level or integration is required.

13. **16.06.02**

a) Consider contrasting/comparing *Motorola* with *Schlumberger.* It is not clear to the casual reader whether *Motorola* resulted in any substantive difference in the treatment of computer-related inventions or simply upheld the principles of *Schlumberger.*

b) The second last sentence states "An algorithm is considered patentable subject matter if ...". It would be helpful to explain this in light of *Motorola.*

c) With regard to the last sentence, it is not clear how it bears on the *Motorola* decision. In particular, what is meant by "further computational systems"?

14. **16.06.03**

a) Why is a method of doing business not considered patentable? As the Patent Act and Rules are silent on this, a discussion of this conclusion based upon the SCC decision in Shell Oil and the FCA decision in the Harvard Mouse case on interpreting an "invention" broadly may be appropriate.

As stated by Wilson, J in the Shell case;

> It is a newly discovered means of regulating the growth of plants and is accordingly a "new and useful art" having economic value in the field for trade, industry and commerce.

As stated by Rothstein, J in the Harvard mouse case;

> The majority's approach [USSC in Diamond v. Chakrabarty, 447 U.S. 303(1980)] is clear. The language of patent law is broad and general and is to be given wide scope because inventions are, necessarily, unanticipated and unforeseeable. I see no reason why it would not be applicable in interpreting the definition of "invention" in section 2 of the Patent Act. Parliament has used the same broad and general language as the United States Congress. The Court must respect Parliament's use of such language and not adopt a narrow approach that would conflict with Parliament's obvious intention.

b) A reference to *Lawson* would be appropriate here, as it is a leading business methods case. *Lawson* states that "professional skills are not the subject matter of a patent."

c) A reference to *Progressive Games* might also be useful.

d) It appears that a method of doing business is patentable only where it is integrated into another method or system. *Shell Oil* shows that a method of doing business is patentable if it shows innovative skill – not that it needs to be integrated into another system. When considering business methods, there is no reason to necessarily import the "integration" requirement that springs from the "mere scientific principle or abstract theorem" restriction. Most business methods, will be, by definition, practical and not mere principles or theorems.

e) Consider reversing the order of the first and second paragraph as it is somewhat awkward to state that a method of doing business is not patentable and then state that there is no clear definition of a method of doing business. Perhaps the new second paragraph could begin with "That being said,...".

f) In general this section is confusing as it is stated that a method of doing business is not patentable then states that there is no clear definition of such methods.

g) In the first paragraph, consider whether the example referring to claim 3 of 16.06.06 is a business method claim, was this determined by the use of business terms such as "cost curve"?

h) In the last paragraph it is stated "...it is not practical to categorize inventions as methods of doing business". Two sentences later it is stated "Business method inventions have similar...". Consider changing "Business method inventions" to "Such inventive methods".

i) In the last paragraph, what is meant by "similar characteristics"? A few examples or expansion on this would be helpful. Perhaps the intent was they often both claim a series of logical steps?

j) In the first paragraph it is stated "integrated into a method or system showing innovative skill and knowledge". The second paragraph refers only to "innovative methods of applying skill and knowledge". Perhaps "systems" should be added to the second paragraph.

15. **16.06.04**

a) In the first sentence, consider changing "The following method consists of a scheme or plan..." to "The following example claim is directed to a method to..".

b) In step 3) of the claim, change "tired" to "tires"

c) In step 4) of the claim, consider adding "and" at the end.

d) As the claim does not mention any form of automation of the method, query whether this is a good example of "There is no invention in the mere automation of a process".

e) The comment "There is no invention in the mere automation of a process" should be perhaps moved to the beginning of the paragraph as an introductory statement. Further, the true nature of the lack of invention should be specified, i.e. lack of novelty, obviousness or subject matter.

f) The example claim appears to be analyzed based upon novelty. Assumptions about the existing art cloud the analysis. Specifically, existence of prior art with regard to novelty or obviousness should have no impact upon whether the subject matter is statutory or non-statutory.

16. **16.06.05**

a) In the first paragraph, consider dropping the comma after "assuming that an undisplayed topical data is available".

17. **16.06.06**

a) In the paragraph following the example claim 3 it appears that the Patent Office will not consider claims that do not differentiate between steps performed by a human over steps performed by a computer. In other fields, such as in a process for making chemical compositions a step of "thoroughly mixing two components" is acceptable. In such fields it is usually irrelevant as to who performs the step. On its face this position appears to be inconsistent. Consider a distinction between a step that requires human interpretation or logic vs. the simple performance of a task. Strict adherence to human involvement is too limiting.

b) In the paragraph following the example claim 3, it is stated "An improved algorithm B, replacing algorithm A, may patentably distinguish over the claim". It is not clear what "an improved algorithm B" would be (no pun intended). An example would be helpful.

c) Further with regard to b) above, it may be better to replace "An improved algorithm B..." with "The same claim reciting an improved algorithm B...".

d) The statement of "Claims for unapplied algorithms ..." is somewhat confusing as it appears that algorithm A is applied.

18. **16.06.07**

a) Suggest changing "the following method" to "the following example method claim". Consider referring to an "example ... claim" for all example claims.

b) The first paragraph refers to "the result" but the term "result" is not mentioned in the claim.

c) It appears from the first paragraph that human intervention is required. There is no indication in claim example 4 that human intervention is required. As discussed earlier, legal support for such a requirement would be useful.

d) The preamble states that "...must be integrated into a system...", the reference to a "system" is not clear, an example would be very helpful.

e) Consider adding "and" after step "c" of the example claim 4.

f) As suggested earlier, consider moving the last sentence in the first paragraph to the beginning of the paragraph, as it acts as an introduction or preamble.

The sentence beginning with "A claim containing an algorithm..." would provide a good preamble.

g) It is not clear to us why this is non-patentable subject matter. Is it due to human intervention, or the lack of "integration" or both?

19. **16.06.08**

a) With regard to the first paragraph, an example of case law indicating that the intervention of human beings in a method claim results in non patentable subject matter would be useful.

b) It appears from the example claim 5 that all of the steps may be implemented entirely by computer equipment. Moreover any steps that could be performed by a human do not appear to rely on intelligence or reasoning of the human mind. Rather, the steps seem somewhat mechanical.

c) In the last paragraph consider changing "The steps in the method" to "The steps in the above method" or "The steps in the method of claim 5".

20. **16.06.09**

a) The current chapter 16 of the MOPOP is titled "Utility and Non-Statutory Subject Matter", this section appears to address adequacy of disclosure rather than statutory subject matter.

b) Delete the extra period at the end of the paragraph.

21. **16.06.10**

a) An example of the case law supporting this point would be helpful. Does this refer to a decision by the Patent Appeal Board regarding an icon pointer? **<does anyone have a cite?>**.

b) Consider expanding on this point that the functions performed behind a GUI may be patentable.

c) Consider why a feature of a GUI that meets all tests of patentablity, would not be considered patentable. If a GUI does provide for improved user access over the prior art, why is it not patentable?

d) It may be possible for a user interface to be sufficient to describe how an invention accomplishes its results, thus this section may be making too broad a statement.

e) An example of a patentable claim using a GUI would be helpful.

f) Perhaps the guidelines should note that a computer listing or user interface may form part of a disclosure that supports patentable claims.

22. **16.07**

a) Why are computer programs considered to be "descriptive material"? We submit that computer programs are functional in that they cause things to happen. This does not seem to us to be merely descriptive. What is the objection to recognizing a computer program as patentable subject matter? If a computer program is "descriptive material" than what exactly is a "computer program product" or a "computer readable medium having computer readable code embodied therein"? Those skilled in the art understand what a computer program is. Other federal legislation such as the Copyright Act have recognized a "computer program" and have provided a workable and practical definition.

b) The statement "Patentable claims must fit into one of the categories of patentable subject matter which are listed in the definition of *invention* which includes a process, machine and manufacture", is at odds with the decision of the Federal Court of Appeal in the Harvard mouse case.

c) Consider adding "art" to "...process, machine and manufacture..." as was mentioned in section 16.06.02.

23. **16.07.01**

a) The example claim 6 may not be the best choice as it could be performed by either human or machine. Since Schlumberger was clear that adding a general purpose computer to a claim will not make it patentable, why restrict the example to a "computer-implemented" method?

24. **16.07.02**

a) Subparagraphs labeled (3) and (4) should be labeled (1) and (2).

b) As discussed previously, the mere fact that a claim may require human interaction, should not by itself render a claim invalid. It is more a question of whether the human must invoke judgement or human skill for the claim to achieve its results.

25. **16.07.03**

a) As mentioned previously this section may be better understood by providing a preamble. A portion of the last sentence of the current first paragraph would serve as a good preamble if moved to the beginning of the paragraph. For example, "Machine (system) claims are frequently expressed in *means plus function* language "

b) The statement cited with regard to Waldbaum is confusing and inconsistent with Schlumberger.

26. **16.07.04**

a) The comment that "Terms, which have not clear dictionary definition..." is a tad puzzling as it is our understanding that should a term used in a claim be defined in the disclosure, that would be sufficient. You may wish to clarify this. Further, one skilled in the art would clearly understand such a term, is it perhaps the use of the word "software" that is objectionable?

b) To indicate in section 16.07.03 that the term "database management apparatus" is acceptable, while in this section "computer software system" is not, is inconsistent to those skilled in the art.

c) The statement that "The claim has no means which are essential to the solution of the problem..." may be a tad overstated. There may be elements missing from the claim, but the two elements that are present appear to be essential. It may be that a better example could be provided.

27. **16.07.05**

a) The terms "computer readable medium" and "computer readable memory" are used interchangeably, we suggest changing all to "computer readable medium".

b) In example claim 10, there is no antecedent for "the computer program" in the preamble.

b) Following example claim 11, the paragraph beginning with "a)" should begin with "b)".

c) The previous use of "Example" prior to an example claim is missing before claims 10, 11 and 12.

d) Perhaps the statement "analogously to claim 7" in the third last paragraph should be "analogously to claim 6".

e) In the second last paragraph replace "numerous variations two" with "numerous variations to" or perhaps "numerous variations of".

f) In the last paragraph beginning with "Claims 1 to 3", perhaps the intent was to refer to "Claims 10 to 12".

g) We do not understand the rationale of the last paragraph. In particular where did the term "functional descriptive material" come from? This paragraph is most fuzzy and does not appear to add to the understanding of patentable subject

matter. We believe the intent here is to clarify that material stored on a computer readable medium for functional purposes may be statutory, where as material stored that does not have a functional purpose (e.g. literary, artistic, etc.) is not statutory.

28. **16.07.06**

a) We are puzzled by the comment that computer programs are not patentable and would like more detail on this conclusion. Computer programs are functional as is a logic circuit. We submit that they should be considered by the same criteria as any other invention and not simply dismissed for containing the word "program" in the preamble.

b) The patentability of example claims 13 and 14 should be considered in light of their functionality. If they teach novel functional embodiments, they should not be prohibited from patent protection. Programs by their nature alter the function of a computer when they are run and thus should be patentable.

c) In the preamble for claim 15, we suggest changing "computer readable material" to "computer readable medium" for consistency.

d) As discussed above with other sections, an example of how claims 13 14 and 16 may be reworded to be considered acceptable would be useful.

e) Consider splitting this into two sections, one that address "non-functional descriptive material" and another that addresses improper claim wording.

29. **16.07.07**

a) It is not clear that this example is automation of a known method, further, it is from an application not before CIPO. We suggest a different example of attempting to patent a known method may be used. This point is well known and perhaps does not even require an example.

b) As suggested earlier, a preamble form may be more user friendly, in this case exchanging the first and second sentences.

30. **16.07.08**

a) As with claim 17, we suggest an example that has been dealt with by CIPO or a fictional example.

b) Claim 17 has been objected to based upon novelty or perhaps obviousness it is not clear that if claim 17 were new or not obvious that it would be statutory.

c) It should be made clear why point-of-view to user claims may be unpatentable. For example it is common to draft a claim to a receiver and transmitter as they interact with a communications protocol, only stating the point-of-view of the

receiver or transmitter. Another example would be an API that defines an interface to software on a computer readable medium, the software carrying out certain functions such as receiving data, checking authority and returning data.

d) In the first paragraph, suggest changing "...different claims are drafted from the view of..." to "different claims are often drafted from the point of view of..."

e) Consider the use of the word "jurisdiction". In the case of a Canadian Patent the jurisdiction will always be Canada. Perhaps using something like "the different elements contributing to the invention for which protection is sought". The user shouldn't be confused with legal jurisdictions.

f) In the first paragraph change "When the complete method claim 17..." to "When the complete method of claim 17..."

g) The word "Example" is missing before Claim 18.

31. **16.07.09**

a) It is not clear if this example is patentable or non-patentable, it is our view that it is patentable.

b) The statement that the "complete invention must be capable of being transmitted" is a tad puzzling. What is the basis for this statement?