

CIS Submission on Draft Patent Manual 2010

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The patent office has released a revised version of the Draft Manual of Patent Practice and Procedure. Section 8.03.06.10 of the Manual deals with patenting of computer programmes.

The section has been entirely reformulated and a few of the changes made to the previous version are welcome.

Positive changes in the Manual

- The provisions relating to making software with “technological features” and “technical applications” which were present in the previous version have been completely eliminated. Thus, the “technical applications” of a computer programme will not make an otherwise unpatentable computer programme patentable subject matter. This also eliminates the need to arrive at a definition of “technical applications” or “technological features”.
- The term “computer implemented inventions” which found no place in the Patent Act, 1970 but was introduced in the previous version of the manual without proper explanation or definition has been eliminated.
- The Manual expressly states that mathematical methods (8.03.06.10.b) and business methods (8.03.06.10.c) are not patentable irrespective of the language in which they are claimed or the form in which they are claimed.
- Computer programme products which were considered to be patentable subject matter in the previous version of the manual are considered to be unpatentable subject matter in the new version. The Manual clearly explains computer programme products to be nothing but computer programme per se stored in a computer readable medium. (8.03.06.10.d)
- The Manual recognises that no computer programme can be functional without hardware to execute the programme. This means that any computer programme cannot become patentable subject matter merely because it is associated with some hardware. (8.03.06.10.g)
- A computer programme which runs on a general purpose known computer is expressly held to be unpatentable subject matter. This is undoubtedly a welcome inclusion since it helps eliminate claims relating to a mere computer programme which may have been considered patentable simply because such computer programme is run using a general purpose computer. This is one

of the common ways in which Section 3(k) is circumvented to obtain patent for claims which are for a computer programme per se.

Contentious provisions of the Manual which require amendment/explanation are as follows:

- **Clause 8.03.06.10.a**

Under this provision, mathematical methods, business methods, computer programmes per se and algorithms are not considered as patentable inventions. In relation to computer programs, the law provides a qualification that what is not patentable is only computer program per se.

While this restates the statute correctly, it does so without offering any explanation, which would be preferable. The Manual should explain the scope of the term “per se” and clear the ambiguity surrounding it. The Manual should clearly provide reasons for any computer programme to fall in either category.

We suggest using the following definition of computer programme per se, which has previously been submitted to the Patent Office¹:

Computer programme per se in the relevant clause means (a) any computer programme in the abstract, (b) any computer programme expressed in source code form, including source code recorded on an information storage medium, or (c) any computer programme that can be executed or executes on a general purpose computer,² including computer programme object code designed for execution on a general purpose computer that is recorded on an information storage medium.³

- **Clause 8.03.06.10.e**

If a claim in a patent application is not directed at a computer programme per se it could be patentable, if all other patentability conditions are met. This provision thus necessitates distinguishing computer programmes per se from other types of inventions that use or implement computer programmes.

The clause, while seeking to distinguish computer programmes per se from inventions which use or implement computer programmes, does make clear what “implement computer programmes” means, nor does it clarify what “computer programme per se” is. A relevant suggestion for a definition for “computer programme per se” has been provided above, which would address this problem.

- **Clause 8.03.06.10.f**

The computer programmes are often claimed in the form of algorithms as method claims or system claims with some ‘means’ indicating the function of flow charts or process steps. The algorithm related claims may be even wider than the computer programme claimed by itself, for a programme represents a particular set, the algorithm expresses the principles .

We find that this clause has no relevance to explaining patentability of computer programmes and thus suggest that the same be deleted from the Manual. The Manual should however make it clear that in algorithm-related claims, if the function claimed to be performed by the invention can be done only by means of a computer programme, such claims are not patentable.

- Clause 8.03.06.10.g

Essentially, all computer programmes need a combination with some hardware for their functionality. In an application for patent for a new hardware system, the possibility of a computer programme forming part of the claims cannot be ruled out. It has to be carefully considered as to how integrated is the novel hardware with the computer programme. Further, it is also to be considered whether the machine is programme specific or the programme is machine specific. A computer programme which may work on any general purpose known computer does not meet the requirement of patentability.

1. With regard to cases of computer programmes being combined with hardware, the Manual seems to suggest that the patentability of the combination is dependent on “how integrated the novel hardware [is] with the computer programme.” This language is very vague and ambiguous. In case of an application for patent for a new hardware system, the Manual should make it clear that such claim is eligible only if the inventive contribution resides entirely in the hardware. The Manual should also require the patent applicant to demonstrate exactly how the inventive step resides in the hardware separable from the computer programme.
2. We propose a new part to the above test to make the clause clearer. The Manual should specify that “the computer programme portions of any claimed invention should be treated as if it were covered by prior art and patentability should thus be determined with respect to the other features of the invention”. This way, we can ensure that an invention which merely uses or implements a computer programme is not granted patent on the basis of the inventiveness of the computer programme per se.
3. It is indeed laudable that the Manual makes it clear that a computer programme which may work on any general purpose known computer does not meet the requirement of patentability. This should make it clear that a computer programme cannot be patentable simply because it is executed by a special purpose computer as long as a general purpose computer can also execute the same. We suggest the following definition of a general purpose computer, which has already been proposed to the Patent Office, be used:⁴

A general-purpose computer here means a device capable of running multiple unrelated programs, often simultaneously for different purposes. It will comprise at least of: (1) one or more central processing units, (2) one or more input devices that are not specific to any one program, (3) memory, (4) one or more non volatile mass storage devices, and (5) one or more output devices. However,

a general-purpose computer does not include a device that itself represents an inventive contribution to the art.

- **Clause 8.03.06.10.h**

Method claims, whether independent or dependent, reciting computer programs without process limitations in the form of hardware features are not allowable. For a method reciting computer programme to be patentable, it must clearly recite into it limiting hardware integers that enable the program to function .

The Clause dilutes the standard set in the previous clauses. It seems to suggest that any method claim is patentable as long as it is connected to hardware which enable the program to function and define its limitations/scope. This position is untenable since no method claim can be purely a computer programme and use of computer programmes for any specific task would necessarily require hardware to implement the same. Therefore the requirement of hardware limitation to make a computer programme patentable is essentially allowing for any computer programme to be patentable. Not only is such a limitation redundant but it also renders the “per se” requirement in Section 3(k) meaningless. Further, the meaning of the term “hardware integers” in the Clause is unclear. For the purpose of this comment, we assume that it refers to hardware features. The Manual should ensure that the method claim has significant per or post processing activity and is not merely combined with hardware to be patent-eligible. This ensures that any computer programme is not granted patent merely because it has certain trivial pre or post processing activities associated with it.

- **Clause 8.03.06.10.i**

Claims directed at computer programs coupled to hardware, enabling the hardware to perform a certain function may be allowable, if such an invention meets all other conditions of patentability.

The Clause is restating the content of Clause 8.03.06.10.e and our comments on this Clause remain the same as our comments for Clause 8.03.06.10.e.

- **Requirement of Disclosure**

We suggest that the Manual require that an application claiming patent for a computer programme (which does not constitute computer programme per se) necessarily disclose the entire source code. This ensures that the invention can perform exactly all those functions that are described in the patent application. Since different computer programmes can be written (with each having different source code) to perform the same function, it is of utmost importance that the applicant demonstrate the workability of the invention described in the application and such proof can be provided only by disclosing the source code.

- **Purpose of the Manual**

There is no clarity on the purpose and authority of the Manual. We do not know if the Manual attempts to explain the provisions of the Patent Act, 1970 to an applicant or is meant to provide guidance to patent examiners or be binding upon them. If a patent official acts in a manner contradictory to the Manual, the consequences of such action is unclear. The Manual should clarify these questions.

1. This definition was formulated and submitted by Knowledge Commons, Delhi to the Indian Patent Office in response to the earlier version of the draft manual. The definition was formulated through the collective efforts of Prabir Purkayastha, Richard Fontana of Red Hat, Venkatesh Hariharan, Tahir Amin, Mishi Chowdhury of Software Freedom Law Centre and Jaijit Bhattacharya. See <http://osindia.blogspot.com/2009/04/computer-programme-per-se-conundrum.html>
2. We propose the following definition of a general purpose computer - A general-purpose computer here means a device capable of running multiple unrelated programs, often simultaneously for different purposes. It will comprise at least of: (1) one or more central processing units, (2) one or more input devices that are not specific to any one program, (3) memory, (4) one or more non volatile mass storage devices, and (5) one or more output devices. However, a general-purpose computer does not include a device that itself represents an inventive contribution to the art. See also Infra n. 3.
3. An information storage medium means any disc, tape, perforated media or other information storage device, which, if fed into or located in a computer or computer based equipment is capable of reproducing any information, other than an information storage medium that itself represents an inventive contribution to the art.
4. This definition was formulated and submitted by Knowledge Commons, Delhi to the Indian Patent Office in response to the earlier version of the draft manual. See <http://osindia.blogspot.com/2009/04/computer-programme-per-se-conundrum.html>