May 15, 2015

Mr. Shri B. P. Singh (via email: birendrap.singh@nic.in)
Government of India
Office of the Controller General
of Patents, Designs & Trade Marks
Boudhik Sampada Bhavan
Nr. Antop Hill Head Post Office
S.M. Road, Antop Hill
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Dear Mr. Singh:

I am writing on behalf of the American Intellectual Property Law Association (“AIPLA”) in response to the Public Notice from the Office of the Controller General of Patents, Designs and Trade Marks announcing the “Draft Guidelines for Search and Examination of Patent Applications” (“Guidelines”). We thank the Indian Patent Office (“IPO”) at the outset for its efforts to bring uniformity and consistency to the search and examination of patent applications, and for inviting comments and suggestions.

In an earlier letter (dated March 24, 2015), AIPLA requested an extension to provide comments on the Draft Guidelines. We are hopeful that our request met with your approval, and that IPO will take into account the following comments.

AIPLA is a national bar association with approximately 15,000 members who are primarily lawyers in private and corporate practice, in government service, and in the academic community. AIPLA’s members represent a wide and diverse spectrum of individuals, companies, and institutions, and are involved directly or indirectly in the practice of patent, trademark, copyright, trade secrets, and unfair competition law, as well as other fields of law affecting intellectual property rights. Our members represent both owners and users of intellectual property in the United States and throughout the world.

COMMENTS

Pages 39-54 of the Guidelines describe how to address subject matter which is not considered an invention under Section 3 of The Patents Act, 1970 (“the Act”). The Guidelines relating to Section 3(k), recited from page 51 onward, are the focus of our comments. Section 3(k) refers to
the patentability of a mathematical or business method or a computer program per se or algorithms.

The Guidelines describe in detail fifteen statutory exclusions, including the exclusions under Section 3(k). The majority of the statutory exclusions are described with respect to case law and examples. However, no examples or case law are provided to support the statutory exclusions of section 3(k), i.e., mathematical and business methods, computer programs per se, and algorithms. In fact, a recent preliminary decision from the Delhi High Court seems to reject the notion that computer programs are precluded from patentability.

In *Telefonaktiebolaget Lm Ericsson v. Intex Technologies (India) Limited*, the Delhi High Court, in its preliminary decision, appears to have found that any computer program invention which has a technical contribution or has a technical effect is not a “computer program per se” and is patentable for the purpose of Section 3(k) of the Act. The Court observed that provisions of Section 3(k) are not new in the field of patent law, and that equivalent provisions exist in other jurisdictions, including the European Union, the UK, and the US (by way of judge made law) that allow for the patentability of software based on technical effect. *Telefonaktiebolaget* implies that software-based inventions are patent eligible under Indian law to the extent the subject matter has a technical contribution or a technical effect.

The technical subject matter of Section 3(k) that would be excluded from “inventions” by the Guidelines has experienced explosive growth in the last decade. Thus, it is very important to ensure a proper basis for these exclusions in order to avoid unnecessary harm to research and development in the particular area of technology. An inaccurate or overbroad interpretation of the exclusions of Section 3(k) may result in such negative ramifications for this subject matter.

However, as we understand them, the Guidelines propose to completely prevent patentability of mathematical and business methods, algorithms and, more particularly, “computer related inventions” (CRI). Courts have yet to confirm this strict interpretation of Section 3(k) adopted by the Indian Patent Office (IPO), and as noted above, the Delhi High Court has held that software-based inventions are patent-eligible under Indian law where the subject matter has a technical contribution or has a technical effect.

We believe the IPO should adopt a more balanced and pragmatic approach, and should interpret Section 3(k) in line with the interpretation of the High Court. There is a chance that the current interpretation by IPO could cause irreversible harm to applicants by prompting examiners to reject applications based on the Guidelines, leaving no opportunity for such rejected patent applications to be revived should the Courts overrule the IPO interpretation. We therefore urge the IPO to act with caution.

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2. See *Telefonaktiebolaget*, pp. 138-151
3. See *Telefonaktiebolaget*, pp. 151-152
4. *Id.*
We further discuss below each element of Section 3(k) which we feel requires amendment.

**Mathematical Methods**

The Guidelines state, at Page 51, “*mathematical methods are used for writing algorithms and computer programs ... and the claimed invention is sometimes camouflaged as one relating to the technological development rather than the mathematical method itself. These methods ... are considered to be not patentable.*”

First, we believe that this statement is inaccurate or confusing, since mathematical methods are not used for writing algorithms. Mathematical methods may be a part of computer programs. For example, a computer algorithm for solving a specific problem may include a mathematical equation, but the underlying computer program code is not processed or compiled based on mathematical methods.

Second, we believe the statement from the Guidelines is overbroad with respect patent applications which do not claim the mathematical method per se (for example, differential calculus method), but instead use or exploit a known or new mathematical method (in tandem with other solutions) to solve a technical problem. Although the Act states that “a mathematical method is not patentable,” Examiners may rely on the Guidelines to reject an inventive method/process to solve a technical problem which uses a mathematical method (with or without other technical steps/solutions) within the realms of Section 3(k). The Act does not state explicitly that use of a mathematical method, with or without other solutions, to solve a technical problem is not patentable.

Third, the Guidelines do not offer any examples of patent application claims (as it does with other technical subject matter) to clarify what exactly may be called a mathematical method.

**Business Methods**

The Guidelines state, at Page 51, “*Business methods claimed in any form are not patentable subject matter.... The claims are at times drafted not directly as business methods but apparently with some technical features.... [T]hey are not considered to be a patentable subject matter.*”

Based on the above statement, it appears that the IPO is aware that some patent applications claim business methods directly but also include some technical features. We encourage the IPO to include in the Guidelines suitable examples to clarify the patentability of business method claims in India. Without sufficient clarity in the Guidelines, examiners may interpret an inventive method or process to solve a technical problem to be barred by Section 3(k) simply because it uses the term “business” or terms related to business. The Act does not state specifically that solving technical problems associated with business transactions is not patentable.
Algorithms

The Guidelines state, at Page 51, “Algorithms in all forms including but not limited to, a set of rules or procedures or any sequence of steps or any method expressed by a way of a finite list of defined instructions, whether for solving a problem or otherwise, and whether employing a logical, arithmetical or computational method, recursive or otherwise, are excluded from patentability.”

Generally, logical steps are involved for any problem-solving approach, whether a computer is used or not. The above statement precludes patentability of such logical steps, which is not intended by the Act. If the above interpretation is strictly implemented, the IPO could only issue patents in limited technologies, potentially stifling innovation in the software industry.

We believe that the above interpretation may be overbroad with respect to applicants of patent applications which claim systems including logical steps for solving a technical problem. There is nothing in the Act which prevents a patent to a system which incorporates logical steps for solving a technical problem. In view of the above guideline, a simple recitation of logical steps may render the claim non-patentable and result in rejections not specifically excluded by the Act.

Computer Programs Per Se

The Guidelines state, at pages 51-52, “Patent Applications, with computer program as subject matter, are first examined with respect to above quoted provisions. If the subject matter of an application does not fall under these categories, then, the subject matter is examined with a view to decide whether it is a computer program per se.

If the claimed subject matter in a patent application is only a computer program, it is considered as a computer program per se and hence not patentable.”

“Even if the claims, inter alia, contain a subject matter which is not a computer program, it is examined whether such subject matter is sufficiently disclosed in the specification and forms an essential part of the invention.” (Emphasis added.)

The first paragraph above implies that any claim which includes a mathematical/business method, algorithm, or computer program should be rejected. This is overbroad with respect to applicants who use a mathematical method or algorithm in a computer system to solve a technical problem. The Act does not envision such an interpretation. Rather, it simply states that a computer program, claimed in isolation, is not patentable.

A claim to a computer program is not directed to an ineligible “computer program as such” if the claim as a whole, in the context of all the circumstances, does not tie up the basic tools of scientific and technological work with a general preemptive effect on the technology.

Europe has a similar provision, which excludes patentability of “computer program as such”. The examination of subject matter of computer-implemented-inventions in the European Patent
Office (EPO) is focused on “technical character.” The Guidelines for examination in the EPO with respect to computer programs specify that if a computer program is capable of bringing about, when running on a computer, a further technical effect going beyond normal physical interaction between the program and the computer, it is not excluded from patentability.

The technical effect brought about by a computer program lends a technical character to the computer program. A further technical effect which lends technical character to a computer program may be found in the control of an industrial process or in the internal functioning of the computer or its interfaces. These could, for example, affect the efficiency or security of a process, the management of computer resources required, or the rate of data transfer in a communication link.

A computer program implementing a mathematical method that itself makes a technical contribution would also be considered to be capable of bringing about a further technical effect when it is run on a computer. Further, it is also legitimate to have a mix of technical and “non-technical” features appearing in a claim, and the non-technical features may even form a major part of the claimed subject-matter.

An inventive step, however, can be based only on technical features, which thus must be clearly defined in the claim. Non-technical features, however, provide no technical contribution to the prior art and are thus ignored in assessing inventive step to the extent that they do not interact with the technical subject matter of the claim for solving a technical problem.

In China, Article 2 of the Chinese Patent Law provides that “Inventions mean new technical solutions proposed for a product, a process or the improvement thereof,” which is similar to the definition of “inventions” under Section 2(j) of India Patent Act 1970. According to China’s State Intellectual Property Office (SIPO) Examination Guidelines, if a computer program implemented invention is solely a “computer program per se,” then it is not patentable. And SIPO Examination Guidelines define a “computer program per se” as a “coded instruction sequence which can be executed by a computer.” A computer program implemented invention that uses technical measures to solve a technical problem and obtain a corresponding technical effect is not a “computer program per se” and should be patentable. Furthermore, as discussed above, the decision in Telefonaktiebolaget implies that software-based inventions are patent eligible under Indian law to the extent the subject matter has a technical contribution or has a technical effect.5

Also, we would like to draw attention to the Report of the Joint Committee on the Patents (Second Amendment) Bill presented in 2001,6 clarifying the intent behind the amendment of Section 3(k) to include the words “per se.” The Report states, “the change has been proposed because sometimes the computer programs may include certain other things, ancillary thereto or developed thereon. The intention here is not to reject them for grant of patent if they are inventions.”7 Accordingly, Section 3(k) was intended not to preclude patent eligibility of

5 Id.
6 Rajya Sabha Secretariat, Report of the Joint Committee on Patents (Second) Amendment Bill 1999 (2001)
7 See Clause 4 of the Report of the Joint Committee on Patents (Second) Amendment Bill 1999 (2001)
computer programs in cases which satisfied the criteria of “ancillary thereto” or “developed thereon.”

AIPLA believes that the IPO should apply Section 3(k) carefully and not in an overbroad manner. The Guidelines as currently proposed seem to imply that the Act is biased towards non-computer related inventions, but the Act simply excludes patentability of computer programs in isolation.

CONCLUSION

We appreciate the opportunity to provide these comments to Indian Patent Office concerning the “Draft Guidelines for Search and Examination of Patent Applications,” and look forward to further discussion on this and other matters of mutual interest. Please do not hesitate to contact us for further information or clarification.

Sincerely yours,

Sharon A. Israel
President
American Intellectual Property Law Association