Study Question

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Sarah MATHESON, Reporter General
Jonathan P. OSHA and Anne Marie VERSCHUUR, Deputy Reporters General
Yusuke INUI, Ari LAAKKONEN and Ralph NACK, Assistants to the Reporter General

Patentability of computer implemented inventions

Responsible Reporter: Ralph NACK

National/Regional Group	Israel
Contributors name(s)	Adv. Eran Bareket, Adv. Saleit Shahar, Adv., Patent Attorney Ehud Hausman
e-Mail contact	erbareket@gilatadv.co.il

I. Current law and practice

1 **Does your current law contain any statutory provisions which specifically apply only to CII?**

No

Please Explain

No, there is no specific provision of the Law that pertains to CII.

Section 3 of the Patent Laws generally defines the criteria that is required for an invention to be deemed patentable. This Section also applies to CII (in particular the language "***product or a process in any field of technology"***, but does not specifically mention CII.

Section 3 of the Law reads as follows:

*An invention, whether a **product or a process in any field of technology**, which is new, useful, and susceptible to industrial application, and which involves inventive step - is eligible for patentability.*

2 **Please briefly describe the general patentability requirements in the written statute based law of your jurisdiction which are specifically relevant for the examination of the patentability of CII.**

The examination of CII is based on Section 3 of the Law as quoted above. The "statutory subject matter" examination (which pertains to CII) relies upon the requirements of:

1) a product or a process

2) any field of technology

3 **Under the case law or judicial or administrative practice in your jurisdiction, are there rules which specifically apply only to CII? If yes, please explain.**

Yes

Please Explain

The Examination Guidelines:

In 2012, the Commissioner issued guidelines relating to Section 3 of the Law- ***A Patentable Invention*** **(hereinafter: "Examination Guidelines).**

The guidelines explain the general concept of Section 3 of the Law, and include directives how to determine whether an invention falls within a field of technology.

The guidelines also include some Auxiliary Rules (in Sections 7.4.1 and 7.4.2), which explain how to apply the guidelines.

Important Case Law:

1. C.A. 23/94 (Jerusalem) United Technologies Corporation v. The Registrar of Patents, Designs and Trademarks, District Court Decisions, Vol. 26 (8), 729 (hereinafter: "UTC").

Though this decision is back dated to 1994, it has remained the highest Court's decision until now.

2. Commissioner's decision in the matter of patent Application Number 171773, assigned to Mordechai Teicher (Appeal against Examiner's Decision), dated December 10, 2012 (hereinafter: "Teicher decision").

3. Commissioner's decision in the matter of Patent Application No. 190125, Digital Layers Inc. (Appeal against Examiner's Decision) of February 14, 2014 (hereinafter: "Digital Layers decision").

The specified Commissioner's decisions rely on the Guidelines of 2012.

4 **Please briefly describe the general patentability requirements under the case law or judicial or administrative practice of your jurisdiction which are specifically relevant for the examination of the patentability of CII.**

The Examination Guidelines:

Section 7.3 of the Examination Guidelines, referred to in the previous div, stipulates that:

a. In order to examine whether the invention is a product or process in a technological field, the invention should be examined as a whole, without dissecting it into components, and without focusing on a single component or a single subgroup of components.

b. Examiners should examine whether the invention, as a whole, makes a contribution having a concrete expression in a technological field - that is the concrete technological character.

c. The contribution of the invention, as a whole, should be examined with respect to the relevant prior art as it essentially arises from the specification (without derogating or exhausting the need of examining inventive step).

The guidelines stipulated in Section 7.4 include some Auxiliary Rules which assist in applying the guidelines:

a. Examination of whether carrying out the claimed invention has expression or modification in the physical features beyond regular operation of an integrated computer system, should be made. If in the affirmative, this is an indication that the invention falls within a technological field.

b. Examination of whether carrying out the claimed invention causes the computer to operate in a new manner, including, but not only, improving the computer's performance (such as speed, reliable performance, improved utilization of data storage capacity), or whether inter-operability is created between components of the computer system in a manner that did not exist beforehand, should be made. If in the affirmative, this is an indication that the invention falls within a technological field.

The Case Law:

1. **C.A. 23/94 (Jerusalem) United Technologies Corporation v. The Registrar of Patents, Designs and Trademarks, District Court Decisions, Vol. 26 (8), 729 (hereinafter: "UTC").**

   As mentioned, this decision constitutes the highest Court's decision, so far.

   In this ruling, the Court took a harmonizing approach, setting out standards that were comparable to those in the USA, at that time, for patentability of software-related inventions in Israel**. The Court stated that a software-related invention may be patentable even where the patentability resides in its software part.** Specifically, the Court held in UTC that, for the purpose of patentability under Section 3, a claim reciting a known hardware component and a new software component **should be viewed as a whole**, similar to the ruling of the US Supreme Court in Diamond v. Diehr (1981).

   The Court also rejected the approach that modification or a change should be reflected in the physical "material" itself, for an invention to be patentable.

   In reaching its decision, the Court drew parallels between the statutory category "process" in Section 3 of the Israeli Patents Law and Section 101 of the US Patent Act. The Court also expressed in that decision a favourable view of the EPO approach to patentability of such inventions.

1. **Commissioner's decision in the matter of patent Application Number 171773, assigned to Mordechai Teicher (Appeal against Examiner's Decision), dated December 10, 2012 (hereinafter: " Teicher decision").**

2. **Commissioner's decision in the matter of Patent Application No. 190125 Digital Layers Inc. of February 14, 2014 (hereinafter: "Digital Layers decision").**

These two Commissioner's decisions rely upon the Examination Guidelines of 2012.

The invention at issue in the decision in the matter of Digital Layer of 2014 defined in claim 1 a system for facilitating access to multiple audio layer items over a communication network. One of the system's components included a mixing module, which was agreed to be a software module. In the decision, the Commissioner ruled, based on div 7.4.2 of the guidelines (which reads: *whether inter-operability is created between components of the computer system in a manner that did not exist beforehand)* that the invention involves new relationships between the physical system components, such that these new relationships allow the invention to fall within a technical field, and thus accepted the invention to be patentable.

5.a

Exclusion of non-patentable subject matter per se.
Do the statutory provisions, case law or judicial or administrative practice (hereinafter collectively referred to as Law / Practice) in your jurisdiction exclude any particular subject matter relating to CII from patentability per se?
In this context, "per se" means that the non-patentable subject matter is identified without any implicit or explicit examination of the contribution to the state of the art the claimed CII makes.

If yes, please answer questions 5.b-5.e, if no, please go to question 6.a

Yes

Please Explain

5.b

Please describe the subject matter excluded from patentability per se and explain in detail how it is identified in practice

The Case Law:

In the UTC decision, the Court held that a "mental process" or "mental acts", or even a complete computer program, as such, is not patentable.

The Examination Guidelines:

According to Section 7.3 a discovery, a scientific theory, a mathematical formula, rules for playing games, and mental acts, as such, will be considered as abstract ideas or processes that are devoid of technical character, irrespective of whether they are performed in a "manual" manner, or by a computer.

Business methods *per se* that belong to the economic world, will not be considered as inventions in a technological field.

5.c **If there is any subject matter identified in a patent claim relating to CII that is excluded from patentability per se, is it possible to overcome a rejection of the patent claim by adding other subject matter to the claim?**

If yes, please answer questions 5.d-5.e, if no, please go to question 6.a

Yes

Please Explain

It is stipulated in the guidelines that technological character may be crystallized by combining the abstract ideas, i.e. the discovery, scientific theory, mathematical formula, rules for playing games, mental acts or business methods, with **additional technological means**.

5.d **Does the "other subject matter" need to have a certain quality, e.g. does it need to be inventive?**

Yes

Please Explain

The certain quality should be in a field of technology, i.e., the "other subject matter", the "additional means" must be technological. However, the additional technological means themselves do not need to be inventive. Inventive step is examined separately under Section 5 of the Law.

5.e **Can you describe the areas of human endeavour the "other subject matter" needs to relate to?**

Yes

If yes, please explain

Same response as above- there should be additional technological means, i.e. the additional means should be in a technological field.

6.a **Requirement of a contribution in a field of technology.**

Does the examination of the patentability of CII in your jurisdiction implicitly or explicitly involve an examination of the contribution the claimed CII makes to the state of the art (such examination may be part of a general "patentability" test or part of the novelty and inventive step/non-obviousness test)?

If yes, please answer questions 6.b-6.d, if no, please go to question 7

Yes

Please Explain

According to Section 7.3.3 of the Examination Guidelines, the contribution of the invention, as a whole, should be examined with respect to the relevant prior art as it essentially arises from the specification (without derogating or exhausting the need of examining inventive step, as required in Section 3 above).

Accordingly, apart from examination of novelty and inventive step requirements (under Sections 4 and 5 of the Law, respectively) , which are separate from the question of statutory subject matter under Section 3 of the Law, if the claimed invention makes a contribution over the prior art "**as identified by the Applicant in the application"** then, this may assist in determining that the claimed invention meets the provisions of "falling in a field of technology" under Section 3 of the Law. (see the specified Digital Layer Decision).

6.b **Does this test implicitly or explicitly involve excluding contributions from areas of human endeavour which are not deemed to be sources of patentable inventions? In other words, does patentability of CII implicitly or explicitly require a contribution from areas of human endeavour which are deemed to be sources of patentable inventions (e.g. engineering, natural sciences)? If yes, please explain.**

No

Please Explain

The fields which were determined to be non-patentable per se (e.g. scientific theory, a mathematical formula, etc.) can be patentable if combined with additional technological means. Once combined, the claim is examined as a whole.

6.c **Does this test also implicitly or explicitly require that the relevant contribution the CII makes to the state of the art qualifies as inventive/non-obvious? This additional test may be integrated into the general inventive step / non-obviousness examination, or may be a stand-alone test. If yes, please explain.**

No

Please Explain

The question of the technical contribution over the prior art for statutory subject matter purposes is separate from evaluating the contribution over the prior art for inventive step purposes. Thus, there may be cases where the invention will be considered as involving contribution over the prior art for statutory subject matter purposes, and thus meeting the requirement of “falling in a technological field", yet, the invention will not be considered as involving inventive step over the prior art, which is a separate test, and thus will not be accepted on grounds of failing to meet the inventive step requirement under Section 5 of the Law.

6.d **Is there an implicit or explicit consensus in your jurisdiction as to the areas of human endeavour which are accepted as sources of patentable CII? If yes, are these areas of human endeavour defined, and if so how?**

Yes

Please Explain

Section 7.4.2 of the guidelines includes some examples, which will be considered as meeting the statutory subject matter criterion under Section 3, such as inventions which involve improving the computer’s performance (such as speed, reliable performance, improved utilization of data storage capacity). The latter seems to be within the consensus areas of human endeavour which are accepted as sources of patentable CII.

7 **Does the Law / Practice in your jurisdiction contain any specific claim drafting or other formal requirements which are applicable to CII, i.e. which deviate from the Law / Practice applicable to inventions which are not CII? If yes, please explain.**

Yes

Please Explain

According to local practice, which was also incorporated in the 2012 Examination Guidelines, data carrier claims are allowed in Israel.

8 **Does the Law / Practice in your jurisdiction contain any specific requirements as to sufficiency of disclosure and/or enablement which are applicable to CII, i.e. which deviate from the Law / Practice applicable to inventions which are not CII? If yes, please explain.**

No

Please Explain

9 **Do courts and administrative bodies in your jurisdiction apply the Law / Practice for patentability of CII in your jurisdiction in a harmonized way? If not, please explain.**

No

Please Explain

The language of Section 3 of the Law was amended on January 1, 2000, in compliance with TRIPS to include the "any field of technology" provision. The UTC District Court decision was ruled before the change of the Law and therefore is silent as to the provisions that were later coined in the Commissioner's decision and Guidelines insofar as determining the patentability of CII.

II. Policy considerations and proposals for improvements of your current Law/Practice

10 **Is the current Law/Practice in your jurisdiction regarding the patentability of CII considered by users of the patent system and practitioners to be understandable and workable? If not, please explain.**

Yes

Please Explain

After issuance of the new Examination Guidelines and the recent decisions in the matter of Teicher and Digital Layers, the criteria for considering patentability of CII may be regarded as understandable and workable.

The guidelines themselves include some Auxiliary Rules, and practical examples, which assist the public in understanding the Patent Office's stance with respect to patentability of CII. As will be noted further below with respect to question No. 17, consideration of the contribution over the prior art, at this stage, may cause certain confusion.

11 **Does the current Law/Practice in your jurisdiction regarding patentability of CII provide appropriate outcomes, in particular from an economic perspective? If not, please explain.**

Yes

Please Explain

We believe that the rules for determining patentability of CII make sense from an economic standpoint. They provide a reasonable level of certainty to Applicants who can judge in advance, before prosecution in Israel commences, whether their CII will meet the patentability criteria in a manner which is more or less similar to leading jurisdictions, such as the US, Europe and China.

12 **In your jurisdiction, is copyright protection of CII regarded as sufficient from an economic standpoint? Please state why in either case.**

No

Please Explain

Copyright merely protects the way of expression itself, whereas the idea (that forms the underlying basis of the CII invention) is not protected under copyright.

13 **Alternatively, is there an explicit or implicit consensus that patent protection of CII is required to ensure sufficient reward on investments made into the development of CII? If yes, please explain.**

Yes

Please Explain

The current guidelines reflect the approach that patent protection for CII is required and essential. Moreover, there is an ever increasing awareness of the importance of protecting CII. However, we cannot state that this awareness is considered as a consensus. In other words, there may be communities, such as the open source community, that do not believe that CII should benefit from patent protection.

14 **In your jurisdiction, is there an implicit or explicit consensus that availability of patent protection should be limited to contributions from certain areas of human endeavour, excluding contributions from all other areas of human endeavour, no matter how advanced these contributions?**

No

Please Explain

We are not aware of such a consensus.

III. Proposals for harmonisation

15 **Do you consider that harmonisation regarding patentability of CII is desirable?**
If yes, please respond to the following questions without regard to your Group's current Law/Practice.
Even if no, please address the following questions to the extent your Group considers your Group's current Law/Practice could be improved.

Yes

Please Explain

Examination of other patentability criteria for CII, such as novelty and inventive step requirements, is reasonably harmonised. One example is the increased use of PPH agreements which Israel has with many countries and jurisdictions such as US, EP, Japan, Canada, China, etc., in addition to being signed on the GPPH agreement. We believe that testing statutory subject matter requirements should also be reasonably harmonized with other jurisdictions. Harmonization brings more certainty to the Applicants and public with respect to obtaining patent protection of their CII. Such certainty is important in the global trading world and may also result in a higher efficiency of the patent system, (e.g. a harmonized way of examining CII which are of a technical nature).

16.a **Exclusion of non-patentable subject matter per se.**
Should there be any exclusion from patentability per se of subject matter relating to CII?
In this context, "per se" means that the non-patentable subject matter has to be identified without any implicit or explicit examination of the contribution to the state of the art the claimed CII makes.

If yes, please answer questions 16.b-16.e, if no, please go to question 17.a

Yes

Please Explain

Abstract ideas, per se, which may include fields such as business method inventions, or inventions which may be devoid of any computer implementation, may be regarded as non-patentable.

Per se should refer to everything that has a non-technical character (for example, an abstract idea, business methods, mathematical

equations and such, which do not involve any technological means and/or are not implemented by a computer).

16.b **Please describe the subject matter that should be excluded from patentability per se and explain in detail how it should be identified in practice.**

See div (a) above.

16.c **If there is subject matter identified in a patent claim related to CII you consider should be excluded from patentability per se, should it possible to overcome a rejection of the patent claim by adding other subject matter to the claim?**

If yes, please answer questions 16.d-16.e, if no, please go to question 17.a

Yes

16.d **Should such "other subject matter" be required to have a certain quality, e.g. should it need to be inventive? Please state why in either case.**

Yes

Please Explain

It should be of a certain quality, i.e. of a technical nature. Once combined, the subject matter should be examined as a whole. However, the technological means, in itself, does not need to be inventive over the prior art, and this question is examined under separate requirements stipulated by the Law.

16.e **If yes to question 16.d above, please describe the areas of human endeavour to which such "other subject matter" should relate.**

N/A

17.a **Requirement of a contribution in a field of technology.**
Should the examination of subject matter eligibility of CII involve an examination of the contribution the claimed CII makes to the state of the art? If not, please explain.

If yes, please answer questions 17.b-17.e, if no, please go to question 18

Yes

Please Explain

Consideration of the contribution of an invention over the prior art, both when examining statutory subject matter and for evaluating inventive step, may be confusing and induce uncertainty to the examination results.

Obviously, if one must decide when to perform such an evaluation, then evaluating the prior art when considering the inventive step criterion is more reasonable.

17.b **Should such examination be made under a test specific to CII, or should it be part of the usual novelty and inventive step/non-obviousness test? Please state why in either case.**

No

Please state why.

Statutory subject matter should be evaluated under a separate test than novelty/ inventive step requirements.

17.d **Under this test, should patentability of CII require a contribution from areas of human endeavour which are deemed to be sources of patentable inventions (e.g. engineering, natural sciences)? In other words, should contributions from areas of human endeavour which are not deemed to be sources of patentable inventions be disregarded? If not, please explain.**

If yes, please answer questions 17.d-17.e, if no, please go to question 18

No

Please Explain

The claim should be examined as a whole. There may be areas such as business methods which involve technological contribution, that qualify as patentable CII.

17.d **Should this test also require that the relevant contribution the CII makes to the state of the art qualifies as inventive/non-obvious? This additional test may be integrated into the general inventive step / non-obviousness examination, or may be a stand-alone test. Please state why in either case.**

17.e **Should there be a non-exhaustive list of areas of human endeavour which are accepted as sources of patentable CII, taking into account the ultimate purpose of patent law (protecting unforeseen, non-obvious subject matter)? If yes, please provide such a list. If not, why?**

18 **Should there be any specific claim drafting or other formal requirements which are applicable to CII, i.e. which deviate from the rules or practice applicable to inventions which are not CII? Please explain why in either case.**

Yes

Please Explain

Data carrier category should be examined specifically with respect to CII and is not related to other fields.

19 **Should there be any specific requirements as to sufficiency of disclosure and/or enablement which are applicable to CII, i.e. which deviate from the rules or practice applicable to inventions which are not CII? Please explain why in either case.**

Yes

Please Explain

The following may be considered advantageous to include in a CII specification:

1. Sufficient disclosure that clearly describes a technological solution (the solution should be recited in the claim).

2. Advantages obtained by the specified technological solution. This may pertain to some, and not necessarily to all, embodiments of the claimed subject matter.

3. Sufficient disclosure of the structure that facilitates the implementation of the CII (not necessarily as strict as required under US Law and practice).

20 **Please comment on any additional issues concerning patent protection of CII your Group considers relevant to this Study Question.**

Please indicate which industry sector views are included in part "III. Proposals of harmonization" on this form:

Please enter the name of your nominee for Study Committee representative for this Question (see Rule 12.8, Regulations of AIPPI). Study Committee leadership is chosen from amongst the nominated Study Committee representatives. Thus, persons not nominated as a Study Committee representative cannot be in the Study Committee leadership.
Adv. Eran Bareket, eranb@gilatadv.co.il. 972-3-5672000