Study Question

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Patentability of computer implemented inventions

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I. Current law and practice

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

No

Please Explain

The national legislation applicable to CII is the same as for any other invention, in any other technical area.

Although Art. 52 (1) (d) of the Industrial Property Code (CPI) refers to the exclusion of "computer programs, as such, without any contribution", computer implemented inventions are considered patentable if certain requirements (subsequently detailed) are fulfilled.

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 applicable requirements consist of the patentability criteria, i.e. the invention must be new, involve an inventive step and have an industrial applicability, as is stipulated in our legislation in Art. 51(2) CPI. These criteria are the same for any invention, including for CII.

More specifically, an invention shall be considered to be new if it does not form part of the state of the art, shall be considered to involve an inventive step if, for those skilled in the art, it does not obviously result from the state of the art and shall be considered as susceptible of industrial applicability if the subject-matter can be manufactured or used in any kind of industry or in agriculture.

As we mentioned in the preceding question, Art. (52)(1)(d) of the CPI also refers to the exclusion of "computer programs, *as such, without any contribution*"; computer implemented inventions are considered patentable if certain requirements are fulfilled.

So, CII will only be excluded from patentability when the subject-matter to be patented is limited to a computer program as such.

Further, Art. 52 CPI excludes from patentability other subject-matter which, not consisting clearly of a CII, is typically integrated into one:

"*1 – The following are exceptions to the previous article:*

a) Discoveries, scientific theories and mathematical methods;

(…)

d) Schemes, rules or methods for intellectual acts, playing a game or doing business and computer programs, as such, with no contributions;

e) Presentations of information.

3 – Paragraph 1 only excludes patentability if the object for which a patent is requested is limited to the elements mentioned in it ".

The provision of Art. 52 (3) CPI is applicable to all the exceptions, and therefore also for such subject-matter, when included in a CII, exclusion only exists when it is limited to its combination with a computer program.

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

In Rule 22 of the Guidelines for Application of the CPI (GA-CPI), but this rule merely refers that CII are not, a priori, excluded from patentability.

Furthermore, in respect of administrative practice the Portuguese Industrial Property Office (INPI) has also issued a manual specifically concerning the practice of this Office in relation to CII.

This guide states that in the examination of a patent application for a CII, before the examination of patentability requirements, the pre-requirement of existence of a technical nature or character is performed, defined as being an absolute requirement. This pre-requisite derives from Art. 51 (2) CPI: "Patents may be obtained for any inventions, be they products or processes, in all fields of technology, (…)".

Therefore, a verification is performed as to the presence of technical features in the application – such as a device or element (server, modem, etc.) or a technical step (such as data wireless transmission, acquisition of data from a temperature sensor, etc.) – and those which are apparently non-technical features – such as for example a mathematical calculation step (calculating the average of a set of values, an algorithm for the encryption of a value, etc.).

Novelty and inventive step are requirements of a relative nature, meaning that they are analysed in comparison with the state of the art. Technical features and non-technical features which make a contribution to the technical nature of the invention are taken into consideration in the subsequent examination of novelty and inventive step.

Thus, the INPI's practice follows that of the European Patent Office (EPO), defined by the case law of the EPO.

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.

As regards administrative practice, the same requirements as for any other invention are applied. In practice, for CII and for patent

applications, the above referred two-step method used by the EPO is applied:

Step i) identifying if an invention is present (consequence of Art. 51 CPI), i.e. if technical features are present in the claimed subject-matter.

Step ii) problem-solution approach (PSA) is applied taking into consideration the technical features and the non-technical features which make a contribution to the technical character of the invention.

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

No

Please Explain

a) No. Art. 52(1)(d) CPI stipulates that "*computer programs, as such, providing no contribution*" are excluded from patentability.

Typically, Art. 52(1)(a) CPI, the remaining part of Art. 52(1)(d) and Art. 52(1)(e) CPI are also taken into consideration as regards CII, as they define that "*mathematical methods*", "*Schemes, rules or methods for intellectual acts, playing a game or doing business*" and "*presentation of information*", respectively, are also excluded from patentability and this subject-matter is also frequently related to CII.

Furthermore, Art. 52 (3) CPI stipulates that "Paragraph 1 only excludes patentability if the object for which a patent is requested is limited to the elements mentioned in it".

Hence, Portuguese law makes it compulsory to identify the "non-technical features" and their contribution to the technical nature of the invention.

5.b

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

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

5.d

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

5.e

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

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

As previously mentioned, the existence of an invention is established if technical features are present. Subsequently, the tests applied for patentability analysis of CII are carried out.

Implicitly, the analysis as to novelty is performed with regard to clearly technical features and non-technical features which contribute to the technical nature of the invention. The analysis as to inventive step is performed with regard to the same features, applying problem-solution approach.

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.

Yes

Please Explain

Again, the same test stipulated by the EPO is applied. In order to define an invention which makes a contribution over prior art, the non-technical features must contribute to the technical character, i.e. they must solve a technical problem. If they do not, they will not be taken into consideration in the assessment as to inventive step, the combination of non-technical features with computational elements typically being considered a mere automation.

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

If a non-technical feature contributes to the technical nature of the invention, it will be taken into consideration in the assessment as to novelty and inventive step, irrespective of whether it makes a contribution over prior art.

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

Non-technical areas are established in Art. 52(1) CPI and the implicit features which relate to the solution of problems in any area of technology are regarded as making a contribution to the technical nature of the invention. Although highly broad, such provisions and practice

help to define certain activities as non-technical.

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.

No

Please Explain

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.

Yes

Please Explain

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

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

The interpretation of law and current practice allow the existence patents for CII, although a more literal interpretation of law might exclude patents of this kind. Thus, it is our understanding that the framework for an appropriate economic outcome exists.

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

Although copyright is highly used in Portugal, it provides a much narrower protection when compared to a patent or a utility model.

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.

No

Please Explain

There is a broadly spread idea in Industry that obtaining a patent and subsequently enforcing it in the field of CII is especially difficult and expensive.

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?

Yes

Please Explain

especially matters related to ethical aspects, such as therapeutic methods or the cloning of humans.

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

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

No

Please Explain

given that the broadest basis for exclusion is presently established in Portuguese law (such as in the case of merely intellectual activities) and the existence of a CII precludes a computer, which is a clearly technical element.

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.

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

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.

16.e

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

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

No

Please Explain

We are of the opinion that the assessment of eligibility should only be based on the presence of an invention, i.e. technical nature only.

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.

17.c

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

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.

No

Please Explain

This would lead to additional criteria, which would bring additional noise, legal uncertainty and confusion in the analysis as to patentability into an already complicated matter.

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.**

No

Please Explain

We consider that the basis for the analysis of such requirements for CII should be the same as for any other technical area.

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.
ELSA GUILHERME