



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?

Yes

Please Explain

Article 2 of the Dutch Patent Act ("DPA") provides that computer programs as such shall not enjoy patent protection. Article 2 DPA reads (translated in English):

Article 2

1. *Inventions in all fields of technology that are new, that involve an inventive step and that are susceptible of industrial application shall be patentable.*
1. *The following in particular shall not be regarded as inventions within the meaning of the first paragraph:*
 - a. *discoveries, as well as scientific theories and mathematical methods;*
 - b. *aesthetic creations;*
 - c. *schemes, rules and methods for performing mental acts, for playing games or doing business, as well as computer programs;*
 - d. *presentations of information.*
1. *The second paragraph applies only insofar as it concerns the subject-matter or activities referred to as such.*

Article 2 DPA is based on Article 52 of the European Patent Convention ("EPC"). This Article does not provide an affirmative

definition of what constitutes an 'invention' within the meaning of the DPA. Instead, it provides for a non-exhaustive list of examples which shall not be regarded as invention within the meaning of the DPA. It follows in particular from Article 2 DPA that computer programs as such are excluded from patentability. This approach is consistent with the EPC.

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.

According to Article 2 DPA, claimed subject matter must meet the following criteria to be eligible for patent protection: (i) the claimed subject matter should be an invention as such, (ii) the invention should be novel, (iii) the invention should involve inventive step and (iv) the invention should be industrially applicable. Under Dutch law, the first three requirements are of particular relevance for the assessment of CII.

The novelty requirement can be found in Article 4 DPA, which is based on Article 54 EPC. Article 4 DPA reads (translated in English):

Article 4

1. An invention shall be considered new if it does not form part of the state of the art.

2. The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use or in any other way before the date of filing of the patent application.

The inventive step requirement is defined in Article 6 DPA, which is based on Article 56 EPC. The first paragraph of this article reads (translated in English):

Article 6

1. An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.

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 the Netherlands, two types of patents exist: European patents granted by the European Patent Office (EPO), which are validated for the Netherlands, and Dutch national patents, granted by NL Octrooiencentrum (the Dutch Patent Office, "DPO").

European patents are granted after examination (Articles 52-57 EPC) whereas a Dutch national patent is a so-called registration patent. This means that the DPO takes no decision on the requirements of novelty, inventive step, and industrial application (Articles 2-7 DPA). The applicant of a Dutch patent must request the DPO for a search report and a novelty report but the Dutch patent is granted as a matter of course, regardless of the outcome of such report. Any disputes over validity (e.g. lack of novelty) should be resolved in court proceedings. The Courts in The Hague have exclusive jurisdiction to revoke Dutch national patents and Dutch parts of European patents. Article 75(1) DPA stipulates, amongst other things, that a patent shall be invalidated by the court in the event that the subject matter for which the patent has been granted is not patentable by virtue of the provisions of Articles 2 to 7 DPA or, where a European patent is concerned, by virtue of the provisions of Articles 52 to 57 EPC.

For the assessment of patentability of a CII, the DPO and the Dutch Courts usually rely on established EPO case law regarding CII. Established case law provides that a CII that has technical character is not excluded from patentability (Article 52(2) EPC). In this respect, the technical character should be established without an assessment of the contribution the CII provides over the prior art.

Further, the CII should meet the novelty and inventive step requirements, i.e. it should represent a non-obvious technical solution to a technical problem in the prior art. Inventive step is usually examined using the 'problem and solution approach' which, briefly put, involves the following steps:

1. identify the closest prior art;
2. assess the technical effect achieved by the claimed invention when compared with the closest state of the art;

3. define the objective technical problem to be solved as the object of the invention to achieve these results;
4. consider whether the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.

For the assessment of the technical effect achieved by the claimed CII, all features which contribute to the technical character of the CII should be taken into account. Features which, when taken in isolation, are non-technical (e.g. features relating to the subject matter listed in Art. 52(2) EPC), but contribute, in the context of the invention, to a technical effect should also be taken into account. In contrast, features which do not contribute to the technical character of the invention (i.e. non-technical features "as such") cannot contribute to inventive step and should be disregarded in the assessment of the inventive step requirement.

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.

Case law of the Dutch courts

We should note that Dutch case law on the topic of CII is scarce. In 2007, the District Court of The Hague held in *Agripa v Roland* that a claim cannot be held invalid pursuant to Article 52(2) EPC if its subject-matter has "technical character" [1]. In the decision, the Court referred to established case law of the EPO on the topic of CII, in particular the decisions T 0258/03 of 21 April 2004 (*Hitachi*) and T 0154/04 of 15 November 2006 (*Duns Licensing*) in which the Board held that "*it is legitimate to have a mix of technical and "non-technical" features appearing in a claim, in which the non-technical features may even form a dominating part of the claimed subject matter*".

Based on the EPO case law, the District Court further ruled that novelty and inventive step can only be based on technical features. The District Court considered that "*non-technical features "as such" do not provide a technical contribution to the prior art and are thus ignored in assessing novelty and inventive step*".

In 2013, the Court of Appeal of The Hague ruled in *Rovi v Ziggo* on the patentability of an invention including an electronic program guide.[2] The Court of Appeal relied on the established case law of the EPO on the topic of CII, in particular T 154/04 (*Duns Licensing*) and G03/08, and considered that claimed subject-matter is patentable under Article 52(2) EPC as long as it contains a technical element, even if this element has secondary meaning to the claimed invention.

The Court of Appeal further considered that an inventive step could only be based on technical features and that "*non-technical features "as such", do not provide a technical contribution to the prior art and are thus ignored in assessing inventive step*". The Court of Appeal considered the case law in T 154/04 as "*particularly relevant*" because the Enlarged Board of Appeal considered in its G03/08 decision that "*the case law summarized in T 154/04 has created a practical system for delimiting the innovations for which a patent may be granted*".

In 2014, the District Court of The Hague followed a similar approach in the case *OpenTV v Netflix*, which involved a patent relating to an access system for online media services. [3] In this case, the District Court confirmed that non-technical features cannot be taken into account in the novelty or inventive step assessment. The mere presentation of a video image was considered to be presentation of information as such, i.e. a non-technical feature, which was therefore not taken into account in the validity assessment of the claimed subject matter.

In 2016, the District Court of The Hague ruled in *HP v Digital Revolution* on the interpretation of functional features in a product claim (in this case a printer cartridge comprising a memory configured to store certain control data) [4]. The District Court ruled that a product claim is novel if it comprises at least one technical feature defining a structural difference with products from the prior art or a functional feature that implies a structural difference with products from the prior art. The District Court held that the claim features directed to memory fields configured to receive and store specific information did not imply any structural differences with memories of cartridges known from the prior art. The Court ruled that these features cannot contribute to novelty.

The interpretation of functional features in a product claim is important for the examination of the patentability of CII. The reason for this is that CII are often defined using functional claim language. We note that this case is pending before the Court of Appeal of The Hague. A decision on appeal is expected in the course of 2017.

Practice before the DPO

Under the Dutch Patent Act of 1910, Dutch patent applications were examined by examiners of the DPO. The examination was carried out on the basis of the guidelines of the DPO, which contained an elaborate chapter on software patents. These guidelines were abandoned when the DPA 1995 was adopted. Despite the lack of guidelines, general guidance on how the DPO handles patent applications on CII can be found in its nullity opinions, which serve as advice to the Dutch courts in nullity actions.

Like the Dutch courts, the DPO is formally not bound by EPO case law. However, practice shows that the DPO tends to seek conformity with EPO case law.^[5]

In a nullity opinion dated 14 March 2008 the DPO ruled explicitly on the exclusionary provision of Article 2 DPA which provides that software as such is excluded from patentability. The DPO referred to the Explanatory Memorandum of Article 2 DPA and considered that this provision is based directly on article 52 EPC. For this reason, the DPO decided to follow the case law of the EPO Board of Appeal for the interpretation of the Dutch statutory provision as opposed to the Dutch case law pertaining to the outmoded DPA 1910.^[6]

On the basis of EPO case law, the DPO considered that the wording “*in all fields of technology*”, as included in article 2 DPA, should be interpreted as to mean that the claimed subject matter must have a technical character in order for it to be patentable. According to the DPO, a technical character can be deduced from the use of technical means, e.g. a computer hard drive, or from claimed subject matter having a technical effect, e.g. a computer program that has an effect on the performance of a known physical element. Claims without technical means or a technical effect are not eligible for patent protection, according to the DPO. However, as soon as a software claim contains any subject matter with a technical character, the claim as a whole is in principle eligible for patent protection (subject to the fulfilment of the other requirements for patentability, e.g. novelty). The DPO stated that this approach is consistent with the approach taken by the EPO on the topic of CII and by referring to a publication in the EPO Official Journal.^[7]

A similar approach was taken in a nullity opinion of the DPO dated 13 July 2006 regarding a computer implemented business method.^[8] The DPO considered that the patent did not contain a patentable invention because the computer implemented business method embodied the modification, production and/or processing of non-technical information. The DPO held that the claimed subject matter did not achieve any technical change or effect that goes beyond what can be expected from normal use of the features involved.

Footnotes

1. [^] *District Court of The Hague, 12 December 2007, IEPT20071212 (Agripa/Roland).*
2. [^] *Court of Appeal The Hague, 25 June 2013, ECLI:NL:GHDHA:2013:CA3887, BIE 2013/8, IER 2013/57 with commentary from A.F. Kupecz, Computerrecht 2013/193 with commentary from T. Overdijk (Rovi/Ziggo).*
3. [^] *District Court The Hague 17 December 2014 (OpenTV/Netflix).*
4. [^] *District Court of The Hague 25 November 2015, IEPT 20151125 (HP/Digital Revolution).*
5. [^] *DPO 20 August 2010 (nullity opinion) regarding Dutch Patent NL 1035516, BIE 2010, 19, par. 5 (Looijengoed/Dronrijp).*
6. [^] *DPO 14 Mar. 2008 (nullity opinion) regarding Dutch patent NL 1 028 098, 8/21 – 9/21 (Bureauvoor Free Publicity/IDMC). The DPO referred to the decision of The District Court of The Hague of 12 December 2007 (Agripa/Roland) and the decisions of the Technical Boards of Appeal T 0931/95 (Pension Benefits), T 0641/00 (Comvik), T 0258/03 (Auction method/Hitachi), T 0424/03 (Clipboard Formats I/Microsoft) and T 0154/04 (Duns Licensing).*
7. [^] *EPO, ‘Examination of Computer-Implemented Inventions at the European Patent Office with Particular Attention to Computer-Implemented Business Methods’. Official Journal EPO (2007/11): 594–600.*
8. [^] *DPO 13 Jul. 2006 (nullity opinion) regarding Dutch patent NL 1 018 008, 9/11 (AllisBlue/Rochet).*

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

Yes. As answered in response to question 1, certain types of subject matter are excluded from patentability per se under article 2 DPA and Article 52 EPC. These statutory provisions also mention the exclusion of computer programs as such. It follows, however,

from our answer to question 4 that these exclusionary provisions are not interpreted very broadly by the Dutch courts and the DPO.

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

The only CII that is excluded from patentability per se are computer programs as such. Guidance on how to identify computer programs as such can be found in the law and practice as discussed under question 4.

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

Such rejection can be overcome by amending the claim in such way that it contains at least one technical feature wherein the non-technical features can contribute to a technical effect if the non-technical features have a certain level of interaction with a technical feature. There is no requirement that such technical feature should be a tangible. For example, EPO practice shows that it is possible to claim a signal or a data format in terms of its characteristic features.

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

No

Please Explain

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

No

Please Explain

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

The DPO and the Dutch courts follow the EPO case law on CII. The contribution the claimed CII to the state of the art is examined in the context of the novelty and inventive step requirements.

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

The contribution of the CII to the prior art should relate to a technical solution of a technical problem in a field of technology. Non-technical features "as such", i.e. features relating to excluded matter pursuant to Art. 52(2) EPC, that do not interact with technical features of the claim – as such – cannot contribute to a technical effect and cannot contribute to novelty or inventive step.

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.

Yes

Please Explain

Please, see the answer in response to question 6b.

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?

No

Please Explain

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

No. There are no formal requirements with regard to claim drafting specifically applicable to CII... We recommend, however, to stick to tried-and-tested claim formulations such as "*Computer program product that when executed on a processor, performs the method according to the preceding claims*".

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

No. There are no deviating formal requirements with regard to sufficiency of disclosure specifically applicable to CII. For example, neither source code nor flow diagrams are required. A functional description is generally sufficient.

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

No comparison is possible between decisions by the Dutch courts and Dutch administrative bodies. As explained in the preceding, a Dutch patent is a so-called registration patent which granted as matter of course: no administrative decisions are taken. Any disputes over validity (e.g. lack of novelty) should be resolved in court proceedings. The Dutch courts have decided only a small number of cases involving CII (see above). There is no indication that the Dutch courts and the DPO apply the law/practice for patentability of CII in a way that deviates from the established case law of the Boards of Appeal of the European Patent Office.

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.

No

Please Explain

Dutch case law on CII is scarce. With that reservation, the cases can be said to show that the practice of the EPO regarding CII is substantially followed in the Netherlands.

This means that CII are only considered inventions in a strict sense, in that they are *inventions* when a *technical* problem is solved in a non-obvious way following the requirements of the EPC and the extensive set of instructions as formulated in EPO Case law, and 'codified' in the guidelines for Examination, notably Part g, Chapter VII, 5.4.1.

We have no doubt that this is workable for clearly technical inventions, i.e. inventions usually strongly relating to technical problems with respect to the technical functioning of devices and their included hardware.

This works equally well for the class of 'inventions' that is so non-technical that it is easy to see that these 'inventions' fall outside the scope of patentability. These inventions are the true exceptions, usually related to methods of doing business, notably financial or administrative systems, or strictly related to presentations of information (esthetic or convenient presentations, strongly related to the information content).

However, we think it will be more difficult to obtain proper protection for inventions having a 'mixed' nature, i.e. inventions without a strong link with devices and hardware having a rather functional nature. For example, we think it will be difficult to obtain a patent for an invention embodied in software only (whilst we appreciate that this distinction is clearly not satisfactory).

For this 'mixed' class, where 'technical' and 'non-technical' elements are intertwined in function, the current standard of examination as used by the EPO may lead to unsatisfactory results. The examination uses the 'requirement specification scheme' which entails that 'non-technical aspects' of the invention are considered a given for the skilled person when confronted with the problem the invention tries to solve.

Examination often conveniently combines requirement scheme arguments (i.e. abstract, functional aspects that are part of the invention, but that are not considered technical) with obviousness arguments for the remaining – more technically oriented – implementation elements. The latter elements are easily considered a 'straightforward implementation' with little possibility for debate. In this debate, prior art plays a limited role so that the applicant is left in a deadlock. This is unsatisfactory as it is often felt that even when the skilled person would take the abstract idea (i.e. of business/administrative/non-technical nature) into account, the implementation is *not* straightforward and the technical choices that are made in the implementation should be equally valued as any other technical choice. Their function and form should be taught in the prior art and a sound reasoning should be provided as to why the skilled person would apply such prior art implementation.

Note that this two-step approach appears to be an unclear and biased instruction set ('ignore all non-technical elements'), the Examiner may not have a positive incentive to assess the patentability as in regular applications and therefore, a 'software patent' is easily considered as 'not inventive'. Further, even if the technical boards of appeal apply a correct approach, most of the time this approach in first instance Examination is a dead stop for the ordinary applicant.

The Dutch group observes that the claims are rightfully taken into consideration as the starting point for the assessment of inventive step in Dutch case law.

For the assessment of inventive step, the Court of Appeal in The Hague has adopted in *Rovi v Ziggo* the approach of the TBA in T 154/04 'Duns', stating that *"it is legitimate to have a mix of technical and non-technical features appearing in a claim, in which the non-technical features may even form a dominating part of the claimed subject matter. Novelty and inventive step, however, can be based only on technical features, which thus have to be clearly defined in the claim. Non-technical features, to the extent that they do not interact with the technical subject matter of the claim solving a technical problem, i.e. non-technical features 'as such', do not provide a technical contribution to the prior art and are thus ignored in assessing novelty and inventive step"* [1]. This means that it is difficult to fulfill the novelty and inventive step requirements

The Dutch group believes that the EPO's hesitations regarding patentability of CII may be at odds with the common perception of the applicant/inventor who spent a great deal of effort in optimizing and realizing the inventive concept and is then denied the reward of a patent whereas in other areas of technology, innovation often results in a patent for very minor technical improvements due to the strict requirements of the problem solution approach (e.g. the difference between *could* and *would*).

The Dutch group believes that this has a chilling effect on small and midsize innovators who increasingly focus on computer implemented inventions. In particular, this may affect their opportunities to obtaining funding for research and development.

Footnotes

1. [Court of Appeal The Hague 25 June 2013 in Rovi v Ziggo IER 2013/57 annotated by A.F. Kupecz](#)

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.

No

Please Explain

No. The Dutch group feels that the outcomes are adverse to an important group of small and midsize innovators which are considered important growth factors for the economy in the Netherlands. In this respect, the Dutch group has sympathy for the arguments of Mr. Kappos, the former head of the USPTO:

"Without clear protection for the software-implemented algorithms powering these innovative and diverse solutions—strong and defensible protection in the form of patents—there would be little incentive for investors, be they small or large, to put resources into these companies or innumerable others like them. Simply put, patents enable the return on investment demanded by venture capitalists, early stage investors and billion-dollar corporate R&D budgets."

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

No. It is generally felt that copyright protection for many reasons is not a sufficiently adequate form of protection, although it is generally accepted in practice that CII is protected by copyright, rather than patent rights. This is for two reasons; the costs associated with applying for a patent and the risk that a patent will not be granted or will later be held invalid compared to typical investments required to develop CII.

Nonetheless, patents are generally considered as more effective tools for enforcement than mere copyright, especially for the protection of intellectual property which required significant investments to develop. Patents are registered, and therefore regarded as more 'solid' rights. Moreover, applications for a European patent are examined by the EPO prior to the grant of the European patent. Third parties will be able to review and respect published patent applications and granted patents as well as the file wrapper. Copyright on the other hand is not registered or examined prior to obtaining such right. It is established automatically by virtue of the creation of the work and is not always publicly available so that it has little deterring effect.

In general, copyright is very much related to 'literal' copying of a work, e.g. the appearance of the software program or the use of

software source code. In contrast, patents not only protect the particular design of an invention, they also protect against variations on that invention as well. Furthermore, assessment of a copyright runs the risk of being considered as a non-technical exercise carried out by technically unqualified persons primarily focusing on the appearance of a work rather than the technical contribution.

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

Yes. Patent protection is indeed required for CII to ensure sufficient rewards on investment whilst we readily admit there may be other factors to weigh prior to making the decision on the investment that may be equally or perhaps even more important. Return on investment is largely determined by market potential, i.e. the size of the market for a product at a specific time and the possibility to obtain and protect a certain market share. Patent protection is the cornerstone for a company to protect its value intellectual property and its market share.

It should be noted that investors are often looking for 'tangible' assets such as patents (registered) while copyrights (unregistered) may be perceived as having less value. We therefore think that lack of patent protection may harm technology investments.

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

Yes. In the Netherlands there is a recent consensus that some aspects of innovation are excluded from patentability. However, this is the case in the area of horticulture where classical breeding rights are considered adequate and sufficient, and patenting of 'essential biological processes' is considered not desirable. The Dutch group perceive this as a clear illustration of undesirable protection when there already there exists another adequate form of protection for the innovator. We also think that patent protection should be available if there are no other adequate forms of protection available to the innovator. This protection should not a priori be denied due to the perceived 'non inventiveness' of CII, in particular in the event that the source code for realizing these innovative developments involves significant efforts and investments . Patent protection for should be available for such innovations.

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

Yes. We consider harmonization regarding the patentability of CII desirable. This is because we believe that harmonization of patentability is beneficial to commerce in general. There is no valid reason to exclude CII. On the contrary, we have the impression that the commercialization of CII is becomes increasingly dependent on intellectual property protection compared to conventional products.

6.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

No. We believe that there should be no exclusion from patentability “per se” for subject matter relating to CII in the context of how the question is phrased. By definition, a claim directed to CII makes clear that the invention is a computer implemented invention. This should be sufficient to escape “per se” exclusion. In our view, however, this does not mean that CII are excused from fulfilling the general requirements for patentability, but this should be assessed on the basis of the contribution to the state of art by the claimed CII (cf. answer to question 17).

6.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.**

6.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

6.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.**

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

7.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

Yes. Examination of subject matter “eligibility” of CII should involve an examination of the contribution the claimed CII makes to the state of the art. To avoid misunderstanding: this does not mean that the Dutch group proposes a return to the contribution to the art test that was abandoned by the EPO after T1173/97. As noted in question 17 b), the contribution could be used in a subject matter test specific to CII, or part of a modified obviousness test.

The justification for such an examination of the contribution is that, although we believe that the fact that a computer implementation is used to implement an invention per se is not a reason for exclusion, we think that special examination of CII is needed in order to avoid that well-established distinctions between eligible and ineligible subject matter may fade just because ineligible subject matter is embodied in a computer implementation and computer programming is considered to be a technical activity. A change in such established distinctions should be left to the legislator.

But the test for CII should not be more restrictive than strictly necessary to avoid that such known, non-eligible subject matter transforms into eligible subject-matter merely due to the implementation with a computer. On the same token, eligible subject matter should not become ineligible just because a CII feature is added to it.

7.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.

Yes

Please state why.

The Dutch group does not choose between a test specific to CII (e.g. the US Alice test) or a test combined with inventive step/non-obviousness (e.g. the European Comvik test). Neither is absolutely superior to the other and, as currently used, both often exclude more subject matter from patenting than is necessary in view of the justifiable purpose of a test for CII.

- In the view of the Dutch group, a special check needs to be added to whichever test (EP or US) is used, to ensure that the test does not go beyond the limited purpose of avoiding that ineligible subject matter can become eligible merely because of automation using a computer. Such a check should make it possible to overcome differences in the outcomes of the US and European jurisdictions.

In view of its purpose, the test should be specific to CII in the sense that it should serve to prevent that subject matter of CII that would not be eligible without the CII limitation becomes eligible merely because it is implemented with a computer. A CII that contains a contribution that is novel and not obvious (e.g. an abstract innovation of bookkeeping) should not make subject matter eligible if the contribution is not eligible itself and it is added to subject matter that is not eligible on its own.

7.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

Yes

Please Explain

- The Dutch group is of the opinion that a distinction based on the "area" of human endeavor (e.g. business automation) from which the contribution arises should be avoided as much as possible.

Such a "contribution from test" should be applied only under threshold conditions for circumstances that make such a test necessary, such as that the "contribution from test" should be used only when the claimed product or method would not be eligible without the contribution.

- The Dutch group suggests that a "contribution 'to' test" which is based on the nature of the area of endeavor to which the contribution contributes, is more justifiable than a "contribution 'from' test" based on the area from which the contribution comes.

For example a contribution that contributes to a telephone system by improving the way in which it collects billing data should be eligible even if the contribution comes from administrative concepts. More generally, an indication for eligibility could be that a contribution is made to an otherwise eligible product or method, and the contribution has practical functional value in that eligible product or method, e.g. by adding or improving a function of the product or method.

The reason for avoiding a "contribution 'from' test" as much as possible is that the Dutch group is of the opinion that patentability should not be dependent on an fictional hindsight classification of the nature of the area of endeavor from which the contribution can be said to come (e.g. an administrative area). Inventors often find such a discrimination unfair. Such discrimination can result in

more exclusions than strictly necessary for the purpose of avoiding that a mere computer implementation will make subject matter eligible that would otherwise be ineligible under established law.

In this respect, it is noted that avoiding a “contribution ‘from’ test” where possible and using a “contribution to test” instead should result in a more liberal approach than the EPO established in the Comvik case law. For example, a contribution that adds an administrative feature to improve a function of an eligible device, e.g. an automatic billing function, should not be disregarded merely because the contribution can be called an administrative concept. Similarly, if a text editor is eligible, a contribution to add a concrete, practical text editing function to the text editor based on a linguistic concept such as synonyms should not be disregarded merely because, when used, its effect on the edited text is of linguistic nature.

7.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.

No

Please Explain

No. Although the purpose of the test, i.e. to prevent fading of established distinctions between eligible and ineligible subject matter, may be satisfied by requiring that the CII aspect of the contribution is non-obvious, this should not be indispensable. A special focus on CII should not exclude that other aspects can make a claim eligible. We do not favor the US approach (Alice) of requiring a threshold quality of the (CII) contribution beyond an abstract idea, when it overreaches the purpose stated in answer to question 17a, e.g. by requiring a non-obvious CII contribution per se.

7.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?

No

Please Explain

No. Formulating such a list would have unforeseeable effects far beyond CII. It would amount to an attempt to codify centuries of patent law development. Existing lists such as the non-exhaustive list in article 52(2) EPC may be useful, but have limited value because it is practically impossible to prepare a complete and exhaustive list and, dependent on circumstances, generalizing from examples can suggest unjustified exclusions. More general terms, such as the European “technical contribution”, or “technical solution to a technical problem”, may be considered. However, the experience is that this is too abstract for many layman applicants, thus resulting in less legal certainty and sometimes a more restrictive approach than necessary. The more general terms may also lead to diverging interpretations by boards and courts.

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

No. In our opinion there should be no special formal claim drafting requirements beyond what is implicit in the term CII: that the invention is implemented with a computer.

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

No. In our opinion there should be no special requirements of sufficiency of disclosure etc. Pieces of source code or implementations of functions can be used to enable an invention, but there should be no general requirement for including such information. As to sufficiency of disclosure, a computer implementation invention should be treated like any other invention.

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

The Dutch group has three issues.

(a) The Dutch group suggests that strict scrutiny should be applied to judicial and statutory rules for eligibility requirements for CII, to avoid that such rules go beyond their purpose. We see this purpose as the need to avoid that a mere computer implementation will make subject matter eligible that would otherwise be ineligible under established law.

The Dutch group observes that legal practice in various jurisdictions is one sided because it tends to only create (sometimes shifting) ad hoc thresholds for claims on CII applications to the detriment of legal certainty. Legal certainty could be served if applicants had the possibility to defend that, in the context of specific CII invention, such a threshold has an effect beyond the purpose mentioned above.

(b) A fair possibility of using functional features is desirable for CII. Current law and practice appear to obstruct or at least discourage use of functional claim features. This is at odds with the reality that CII usually rely on functions rather than on specific implementations of such functions. For reasonable protection, functional features should be preferred and rejected only based on the limit of functions that a skilled person is not able to implement.

(c) It is undesirable to impose limitations that require "tangibility" etc. because intangible signals can be as concretely useful as tangible objects. Similarly, software can improve the functioning of an already existing tangible device. The Dutch group sees no reason to exclude such intangible developments per se from patentability.

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

Manufacturering of digital imaging products

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.
Johannes van Melle