

Computer-Implemented inventions **Frequently Asked Questions**

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1. What is the reason for the Directive proposal?

Why is this directive needed?

The directive would harmonize the law throughout the EU. And the objective is to introduce a clear requirement into EU law that in order to be patentable the innovation has to make a technical contribution. This will make it clear that pure software is unpatentable.

Is this a new approach to patenting?

Patenting of inventions in the field of computer-implemented inventions (CII) is not new in Europe. In accordance with the European Patent Convention (EPC) the European Patent Office (EPO) in Munich has for many years granted many patents crucial for the innovation in for instance mobile telephony, medical equipment, cars, televisions, voice- and image-recognition devices, digital rights management solutions, and in countless other areas.

⇒ ***Patenting CII is nothing new in Europe. The Directive as it stands is not about patenting software. It would only continue to allow genuine technological computer-implemented inventions.***

2. Why are patents important?

Why are patents important for running a business in the high-tech sector?

Patents create a basis for business models, investment in R&D, licensing technology, protection of innovation and wealth creation. Patents allow the inventor to recoup the R&D investments needed to make the invention. This will stimulate him to re-invest in R&D. Europe benefits are twofold: patents enhance the competitiveness of industry and ultimately support the process of offering the consumer high tech products.

If patents for computer-implemented inventions were banned, would it not create a level playing field for both European and non-European companies with no-one having enforceable patents in Europe?

The high-tech market is global and patents for digital inventions are available outside Europe and more likely to be held by non-EU companies. European Companies would face a higher barrier to entering global markets. Especially European SMEs with Europe as their only, or major, market would be vulnerable. The impact is huge: in many sectors of industry, 70 to 90% of all inventions are computer-implemented.

What effects would a ban on patents for computer-implemented inventions have internationally?

European technological innovations would be much weaker in the global marketplace. While not being able to license technologies to others, European companies would be forced to buy licenses when entering other markets. Initiative to invest in innovation would decrease and companies – small or big – would not be able to generate value through their patents.

How would companies operate without patenting?

They would protect their inventions with patents in other parts of the world and launch products in the EU only when the technology is mature and the risk of it being copied has decreased. They would resort to trade secrets, closed business models and not disclose interface information for interoperability.

3. How can we ensure that high quality patents are granted and patents on pure software, business methods, and on trivial ideas excluded?

Computer-Implemented Inventions have to do with the existence of a computer program as a component of an innovation, which must make a technical contribution. Patents must be allowed for these innovations to secure the competitiveness of European industry. The requirement for a “technical contribution” excludes patents on pure software, algorithms and business methods.

In determining the patentability of an invention, the patent office makes the best decision possible on a case-by-case basis, implementing the existing rules as well as they can. This is the same for computer-implemented inventions as in all fields of technology. As in many other areas in life where distinctions are important, there is a gray area where the distinction is not easy to make. When differentiating between ‘pure software’ and ‘computer-implemented inventions’, or between ‘trivial patent applications’ and ‘serious patent applications’, the best solution is to strengthen the gatekeepers. Some wrong decisions can never be excluded, but there is a low-cost and very effective system in place in Europe for anyone to challenge a patent they believe the patent office should not have granted: the so-called opposition procedure. On average more than 2,000 patents are opposed at the European patent Office every year.

Also, patent owners themselves often decide not to continue with a patent application or a granted patent, because of issues raised by the patent office or for other reasons. This is another way the system weeds out weak or commercially uninteresting patents. In 2003, the EPO reported that more than a third of all patent applications never reach the grant stage. Many more patents are dropped after grant and so are not enforceable.

The European Patent Office has already granted some business method patents. Would the Council text make business methods patentable in the EU?

No. The directive text as drafted in the Council would clearly ban the patenting of business methods. If there are cases where business method patents have slipped through the net in Europe they can be challenged and revoked.

Would the Council text allow mathematical algorithms, mathematical methods, scientific theories, and mental acts being patented?

No. The directive text as drafted in Council expressly bans the patenting of these.

4. How are interoperability and open standards affected?

Do patents for computer-implemented inventions hinder interoperability between products?

No, and the telecommunications sector is a good example of this. Inventions in mobile telephony are built on hundreds of patents for computer-implemented inventions and yet equipment and networks are interoperable.

The key is development of open standards and open interfaces. Note that 'open standards' is not the same as 'open source'. Open standards are often based on patented inventions but they are available to all actors against a fair, reasonable and non-discriminatory licence fee.

If patents were not available, there would be more reliance on trade secrets rather than openness, leading to more proprietary standards and fewer open standards – and less interoperability.

⇒ ***A European citizen can call or send a sms (text message) to friends using a mobile telephone of another brand or another network in another country. This is enabled by computer-implemented inventions that are built upon patents and covered by open standards!***

5. Why is copyright not enough?

Why are copyrights not enough in protecting digital inventions?

Copyright protects the program code, i.e. the form in which it is written or recorded, while patents protect the *function* of an invention – i.e. the way it works.

In mobile phones for instance, patents are held for converting speech into digital signals at one end and reconvertng the digital signal back to voice at the other end in the mobile phone. These are technical functions and would not be protected by copyright. In most cases the major part of the investment goes into the ideas and functionality of an invention and not into the software that is incorporated in the invention.

6. How do patents affect SMEs?

Are patents for computer-implemented inventions bad for SMEs?

Certainly not. SMEs that make inventions having a technical effect are able, with the help of patents, to protect their inventions. The protection is important for growth, venture financing and negotiation leverage with other companies, big and small. In most cases patents are the only way for SMEs to reach out to a larger customer base by licensing their technology to larger companies and benefiting from each product sold by the larger company.

Can SMEs afford patenting?

Patents are an investment, no doubt. This is true for patents in all fields, not just telecommunications or information technologies. But patents need to be available, both for SMEs and large companies, to ensure a return on and exploitation of costly research programmes.

There are initiatives, e.g. in the EPO, to try and reduce the cost of patenting for SMEs, and national Patent Offices have a role to play here too by awareness campaigns and education. The adoption of the Community patent regulation could certainly help in these efforts.

7. How can patents and open source live together?

Some Open source software producers are afraid of the directive, rightfully so?

The directive does neither introduce patents, nor extend their scope. The open source software movement has been developing in Europe alongside of patents in the last decades. So far few, if any, open source projects have been threatened with patent litigation and there is no indication that this will change in the near future.

On the contrary: The open source movement today is well established in Europe. Their position of collective strength will help them even in the unforeseen event that a producer of OS software should be faced with patent litigation. The increasing importance of open source for larger companies has also lead to a situation in which larger companies issue statements that they would not use their patents against open source, Novell even declared to protect open source by their own patents. In fact, even members of the open source community have applied for patents to protect important inventions. An example is the patented improvement to the Linux operating system to make this system work for real-time applications.

Why are certain companies supporting both patenting and open source?

Because in some applications open source is simply a more viable option. Many companies are applying open source solutions in certain products, and solutions based on patented inventions and open standards in others. The two can even be combined in the same product. Patents and open source can- and already do - live comfortably side by side.

8. What are the effects of EP amendments?

Do you share the EP view against pure software patents?

Yes. We are against a low patentability threshold in the EU. Therefore we are also against pure software patents. However, when software is a component part of a technical invention, patents need to be available. One has to be very careful in wording the Articles of the Directive, so as not to introduce any material changes of current European patent law.

How do EP amendments affect patentability of digital inventions?

The wording of articles such as 3, 6, 7 and 9 are so generic that they would in effect render patenting of any computer-implemented inventions impossible in the EU. If the intention of the legislator was to exclude pure software patents, patents on business methods and trivial patents which we support, the end-result was in fact much broader than that.

9. Can you explain the difference between the US and the European patent system and indicate which system you prefer?

The US system is far more liberal towards patenting. The requirement that inventions have to make a “technical contribution” is not a feature of US law. The result is that non-technical and/or “trivial” inventions and business methods can be patented in the US. We strongly support the European approach of a moderate patent protection.