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# Personal third party response to the EBA concerning case G 3/08

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***Note that I am a technical expert, not a legal expert. It is my strong opinion that many of the legal discussions surrounding this case are uninformed, and would benefit from technical expert input.***

*1. Can a computer program only be excluded as a computer program as such if it is explicitly claimed as a computer program?*

No, of course not. Merely calling it something else, possibly to try to circumvent the rules of exclusion, does not change the fact that it is a computer program, if that is the case. Claims should be examined based on substance, not based on the use of language.

*2. (a) Can a claim in the area of computer programs avoid exclusion under Art. 52(2)(c) and (3) merely by explicitly mentioning the use of a computer or a computer-readable data storage medium?*

No, of course not. A computer program cannot usefully exist without a storage medium *and* a computer to run it. To assume that explicit mention of such obvious prerequisites for a computer program would change the substance of a claim is preposterous.

*2.(b) If question 2(a) is answered in the negative, is a further technical effect necessary to avoid exclusion, said effect going beyond those effects inherent in the use of a computer or data storage medium to respectively execute or store a computer program?*

Yes, of course. Executing a computer program by definition changes the physical state of the computer that runs it. If such effects were to be considered as grounds to avoid exclusion, no computer program of any sort could ever be excluded. A patent should not be granted on a computer program just because the claim says that the intention is to store or execute said program. Of course the intention is to store and execute it – assuming any other intention is just plain silly.

*3.(a) Must a claimed feature cause a technical effect on a physical entity in the real world in order to contribute to the technical character of the claim?*

(My response here assumes that "a physical entity in the real world" excludes the computer itself.)
It depends. Any computer program that does not have a physical effect on the outside world and runs on a general purpose computer should by definition be considered a computer program as such. It is merely processing information, not putting that information to any technical use. If, however, the program is designed to run exclusively on a special purpose computer with inventive architecture, it can add to the technical character of the claim without having a physical effect on the outside world. In this case, the program is inseparable from the hardware. Many modern technical inventions make clever use of hardware and software in combination. Software components of such inventions can be an integral part of the technical invention (though they need not be), and can be both novel and non-obvious (though they need not be).

*(b) If question 3(a) is answered in the positive, is it sufficient that the physical entity be an unspecified computer?*

No, of course not. Changing the state of the computer that runs a program is an inherent and inevitable effect. A computer program is utterly meaningless without a computer to execute it, and to artificially include an unspecified or commodity computer in the claim does not change the fact that the claim concerns a computer program. If anything, it emphasizes that fact, because a general purpose computer accepts only computer programs as such. Only special purpose or otherwise novel and non-obvious computer designs, special hardware components and/or peripherals can contribute to the technical character of a claim.

*(c) If question 3(a) is answered in the negative, can features contribute to the technical character of the claim if the only effects to which they contribute are independent of any particular hardware that may be used?*

Effects which are independent of the hardware used are by definition not technical. If general purpose computer hardware can be used, the claim concerns only processing and exchange of information, not a technical invention. Computer programs which are not tied to particular, non-standard and explicitly disclosed hardware should be considered computer programs as such.

*4.(a) Does the activity of programming a computer necessarily involve technical considerations?*

No. The art of programming has long since been able to separate itself from technology by layers of abstraction. While some forms of programming activities for particular computer hardware are still tightly associated with technical considerations, programming is no longer necessarily technical in nature. Computer engineering (the construction of computers), is largely distinct from computer science (the programming of computers), and programming as an activity is generally not a technical subject any longer. Computer engineering is a highly technical subject, but computer science is an abstract subject just like mathematics and logic. Programming is not in and by itself concerned with technical matters, even though it can be applied to technical problem solving, just like mathematics and logic. It is important to make this distinction between computer engineering and computer science.

*(b) If question 4(a) is answered in the positive, do all features resulting from programming thus contribute to the technical character of a claim?*

While features resulting from programming *can* contribute to the technical character of a claim, all such features are not necessarily technical in character. Claims need to be carefully examined on their substance, no broad and unspecific rule can be applied.

*(c) If question 4(a) is answered in the negative, can features resulting from programming contribute to the technical character of a claim only when they contribute to a further technical effect when the program is executed?*

Yes, most definitely. Note, however, that the further technical effect may be an internal effect in special purpose computer hardware, it is not necessarily restricted to physical effects on the outside world.