The Computing Technology Industry Association

30 April 2009

Registry of the Enlarged Board of Appeal
European Patent Office (EPO)
80298 München
GERMANY

Dear Sirs

**AMICUS BRIEF IN ACCORDANCE WITH ARTICLE 10 OF THE RULES OF PROCEDURE OF THE ENLARGED BOARD OF APPEAL**

**CASE G3/08**

**REFERRAL UNDER ARTICLE 112(1)(B) EPC BY THE PRESIDENT OF THE EPO TO THE ENLARGED BOARD OF APPEAL RE THE PATENTABILITY OF COMPUTER PROGRAMS**

On behalf of the Computing Technology Industry Association (CompTIA), we thank you for this opportunity to submit views in connection with Case G3/08 and the task before the Enlarged Board of Appeal. With this submission, we endeavor to assist the EPO in its important goal of clarifying the legal requirements concerning the scope of patent-eligible subject matter pertaining to computer programmes and the contours of its examination policy.

**Background**

The Computing Technology Industry Association (CompTIA) is the voice of the world's $3 trillion information technology industry. CompTIA membership comprises more than 250 European computer companies and software associations. Our worldwide membership extends into more than 100 countries and includes companies at the forefront of innovation; including, the channel partners and solution providers they rely on to bring their products to market, and the professionals responsible for maximizing the benefits organizations receive from their technology investments. The promotion of policies that enhance growth and competition within the computing world is central to CompTIA’s core functions. Further, CompTIA’s mission is to facilitate the development of vendor-neutral standards in e-commerce, customer service, workforce development, and ICT (Information and Communications Technology) workforce certification.
CompTIA has long advocated for a strong patent system across Europe and its member states, including broad eligibility for computer programmes and computer-implemented inventions ("CII") at the EPO and its member states for the following policy reasons:

1) **"One-stop shopping":** A robust computer programme and software patenting regime harmonised across the EU simplifies the legal paperwork and the management of IP rights—a hallmark of any true single market.

2) **Legal Certainty Attracts Investment:** More property, more collateral; cash-poor SMEs have something they can literally bank upon. Patents give SMEs something to negotiate with.

3) **Transparency:** Patents are published and can facilitate the transfer of technical know-how. Why re-invent the wheel when you can license it?

4) **Competitiveness:** Major trading partners in Japan, Western Europe, Canada and America have regimes that recognize robust rights surrounding computer programme and software patent eligible subject matter. All European firms need to recognise them, understand them, and generate their own patents as their economies develop.

I. **Introduction**

A. **Current Legal Framework: Choice of Law, Harmonisation, and TRIPS**

A fundamental issue at the heart of the Referral is the choice of law. As a precursor to the questions raised by the President’s Referral of 22 October 2009 in case G3/08, we wish to emphasize the following issues raised by its discussion of the current legal framework surrounding the patent law across Europe. The Referral emphasizes the primacy of the European Patent Convention (EPC). It also denies the applicability of the TRIPs Agreement in its work because, *inter alia*, "the European Patent Organisation itself is not a member of the WTO and is not a signatory of the agreement." Numerous other *amicus curiae* have discussed with in-depth analysis and precision how the relevant TRIPS provisions concern the scope of patent eligible subject matter (i.e., TRIPS, Article 27, "in all fields of technology . . . patents shall be available and patent rights enjoyed without discrimination as to [] the field of technology.").

In sum, CompTIA agrees on the merits with those *amicus curiae* that explain that the EPO’s adhesion to TRIPS would provide a beneficial patent law framework for Europe at large. Further such an EPO position would easily resolve any alleged divergences in the Board decisions presented by the Referral wisely and also would benefit a broad array of European interests for enhanced innovation, global competitiveness, and workforce development.

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1 Hereinafter, the Referral.

2 Referral at 16.
CompTIA and its members companies find the EPO’s position concerning the germaneness and application of TRIPS results a very troubling conclusion. All EPO contracting states (with one current exception) and the European Union arc WTO members, and hence almost all are TRIPS signatories. Further, many have enjoyed this status since the mid-1990s and thus have settled expectations. For almost two decades, European inventors and innovative companies have held fundamental expectations underlying a basic understanding of the eligibility of patentable subject matter. Likewise they have enjoyed a degree of certainty, the opportunity to innovate, and the ability to attract venture capital financing. Though the EPO states that it does not follow TRIPS—a conclusion based on dubious jurisprudential grounds—we arc unaware of any legal authority that prevents it from doing so. Accordingly the EPO’s statement and course of action have dire consequences for Europe’s innovative technology companies, the European workforce, the member states’ economics, and the principles underlying the goal of harmonisation.

In contrast, the EPO’s recent publication, SCENARIOS FOR THE FUTURE, praises the goals surrounding harmonisation:

Globalisation has integrated national economic systems through international trade, investment and capital flows as well as increased social, cultural and technological interaction. It has accelerated the pace of change, creating economies of scale which has lead to an economic, social and political competitive flattening of the world between a multiplicity of players that include countries, regions, hotspots and city states, market sectors, global companies, organizational and business models, consumer markets and workforces, business and universities as well as cultures. In this global jungle, there are many who are ill-equipped to adapt. Protectionist measures—such as increased tariffs or trade restrictions—carry risks. The conclusion that the EPO is exempt from TRIPS and the associated promises of a global, harmonized patent system is sincerely regrettable. It also risks Europe’s international leadership in the technology arena. For example, as a key part of the Trilateral Organization and partnership with the USPTO and the Japan Patent Office (JPO), the EPO serves as a world technology leader. We all know what the reaction across Europe would be if the USPTO or JPO made a unilateral declaration it was not obligated to follow a multilateral agreement in the context of Intellectual Property Rights or otherwise. The EPO has warned that:

[The patent system is far too complex, and the issues far too diverse for any single group of stakeholders to decide its future... At the core is the growing importance of

3 Currently, Monaco is not reported as a WTO member.

knowledge, and the question is how best to adapt the fundamental changes in the way in which knowledge is being produced and used within a global society."

Accordingly the future of the scope of patentability and eligible subject matter is best left to EU policy-makers, not the organisation.

Just as it is inconceivable that nations would tolerate a declaration by NATO that troops under its command were exempt from the Geneva Accords because the NATO High Command had itself not signed the Accords, so one doesn’t expect the body representing Europe’s patent interests not to accept an IP Agreement signed by virtually all European states and the European Commission.

The EPO is an institution representing the collective interests of its membership with regards to the development and issuance of patents. To the extent that those interests evolve over time, the EPO should be cognizant of those developments as they are expressed, as in binding treaties signed by all of its members. Since its members and the EU are signatories of TRIPS, the EPO cannot deny the applicability of TRIPS within those territories. So, perhaps the EPO can craft a ruling that is not compliant with TRIPS, but which member state could exercise that ruling, without being in non-compliance with its own treaty obligations? Since compliance to EPO and WTO are both treaty obligations, should not the EPO seek either to conform its rulings to comply with TRIPS or actively to change TRIPS to conform with EPO rulings (the far more difficult undertaking since it means changing an agreement with 123 mostly non-European parties that has not been significantly altered since it was signed in 1994) in order to spare placing its members in an impossible situation?

5 EPO Scenarios at 11.
II. Questions Raised by the Referral

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

The first threshold question in this inquiry addresses the relevance of the category of the claim. The President’s Referral explains that despite the various feasible claim formulations (e.g., methods, systems, computer-implemented methods, and computer programs), the underlying method performed by a computer may be identical. The Referral identifies a handful of cases that are intended to illustrate a divergence in substantive patent law (e.g., T 1173/97, T 424/03, T 1173/97, T 424/03). For the following reasons, we answer no.

We find it regrettable that a paramount inquiry concerning the subject-matter (patentability) of inventions from innovators from the Member States should focus on form over substance. The legal practitioner’s ability to artfully draft a claim should not permit one to evade the law. While we recognize that exclusions from patentable subject matter exist under Articles 52(2)(c) and 52(3), we also wholly acknowledge as undisputed that provisions of controlling textual authorities and case law permit the patentability of appropriate computer-implemented inventions. The key to the underlying, essential examination inquiry is a matter of substance, not mere form. Namely it is whether the application presents a claim for an invention of a sufficient technical character pursuant to the EPC. It is uncontested that “technical character” is the crucible upon which the Board relies in its patentability analysis for these species of claimed inventions.

The Referral’s allegation of divergence in the law does not follow from the EPO’s misunderstanding or misapplication of controlling law or precedent. Rather the “dissatisfaction” at hand appears to be based on how the Board judged various distinct inventions in various cases. A sound legal analysis should not rely on whether certain terminology, lexicography, or other such “magic words” are invoked — “a computer system” or “computer method” — but rather on the attributes of the technological invention claimed based on the relevant EPC requirements (e.g., novelty), on the whole, in light of the prior art.

As recent history has illustrated, a well-functioning patent office can weed out trivial inventions through a rigorous, quality examination. Any attempt by the EPO to otherwise perpetrates in an irresponsible legal, scientific, and economic fiction.

We respectfully note that the EPO contracting states have granted more than 30,000 such patents in these fields relating to computer programmes. Hence the Referral’s citation of a handful of cases in the present instance is neither a manifestation a legal conflict, vis-à-vis a meaningful divergence nor the need for the Enlarged Technical Board to attempt to revise the law in this area. It is a well known legal axiom

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6 Referral at 4.
that "hard facts make bad law." Accordingly the answer to this question is that its examination policy should continue as it now stands, and review cases on a case-by-case basis.
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April 2009

Question 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?

(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?

The second question presented concerns the computer claim as a whole, including the explicit mention of certain elements. The President's Referral narrowly frames this claim drafting question. The Referral acknowledges, "[i]t is established that if the subject-matter of a claim has technical character, then it is not excluded from patentability under Art. 52(2) and (3) EPC." This present question attempts to construct a bright-line test concerning the scope of patent eligible subject matter under the EPC. Building on the answer of Question One and our answer's reasoning concerning "artful claim drafting," both theory and practice dictate that both questions 2(a) and 2(b) be answered in the negative.

In sum, the answer to both portions of Question Two can easily be found in the EPC. Article 52(1) establishes a requirement that an invention must have a technical character. Accordingly the conclusion that "technical character" is manifest in a patent claim is sufficient to avoid exclusion under Articles 52(2) and (3). A quality examination of the claim as a whole will reveal whether this threshold has been met, inter alia, by the use of these claim elements, such as a computer or data storage media. The EPO must never prejudge technology (or distinct elements) in a vacuum. The need for the so-called "further technical effect," in instances such as the use of a computer or data storage medium, is merely another dimension to these considerations. We urge the EPO to continue to review applications on a case-by-case basis, reviewing the invention as a whole. Further, the EPO, as all patent offices, must focus on substance over style. And so it must ask whether the inventor seeks to achieve a "technical character" in earnest or merely a through artful drafting of a claim. This is true in the computer programme technology industry, as well as all other classified art areas such as the mechanical or chemical fields.

Again, the implicit issue is whether a divergence in the law has occurred. The decisions cited appear to compare patent claims for extremely different species of technology. Accordingly the Board's analysis and application of controlling law may have been valid and accurate on the merits of the claims-in-suit as a whole. (CompTIA takes no position on any of the decisions cited in the Referral.)
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Question 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?

The essence of the third inquiry is how can one define the "technical character" of a claim, namely whether a "physicality" requirement exists under the EPC and other controlling authorities. It is again alleged that there is a divergence in the law among the Board decisions (e.g., T 163/85, T 424/03, T 125/01, T 163/85, T 190/94). For the following reasons, the EPC does not permit the imposition of a "physicality" requirement for patent eligibility. For the following reasons, we answer no.

The Referral seeks to define the term "technical effect" pursuant to the EPC. It is undisputed that the term "technical" is not defined by the EPC; however, the Board helps give meaning to the term "technical." The interpretation of "technical effect" is necessary for the satisfaction of the "technical character" requirement for patentability. The Board has ruled that any exclusion for patentable subject matter be interpreted narrowly (Art. 52(3) EPC).8

Any suggestion that a claim's "technical character" requires a technical effect on a physical entity is certainly an imposition of a new limitation on the scope of patentable subject matter. Such a new "physicality" requirement has no basis in the text of the EPC. The imposition of a "physicality" requirement would also lead to several unfortunate outcomes. The first is whether such a physicality requirement would ultimately be restricted to this area of technology. If this is true, then it is discriminatory. Second, if a physicality requirement is applied to all areas of patent law under the EPC, then other European industries could be harmed (e.g., chemical reaction intermediaries, digital signal processing, photonic inventions).

The Board should faithfully adhere to the text of the EPC to define the scope of patentable subject matter, within the current legal framework. Article 52(1) states: "(1) European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application." (emphasis added). Accordingly it is clear that Article 52(1)'s requirement that a patent must be susceptible to "industrial application," along with the limited exceptions articulated, preempt any "physicality" requirement. In all reality, if a claimed invention has "industrial application" and does not fall into the EPC's enumerated exceptions, the EPO should not be able to restrict the scope of eligible patentable subject matter. Again the EPO is free to review the invention as a whole for criteria such as novelty, inventive step, clarity, once it has crossed the eligibility threshold.

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8 id. at 5.
(b) If question 3(a) is answered in the positive, is it sufficient that the physical entity be an unspecified computer?

(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?

Again, our answer to these questions is based, *inter alia*, on the previous discussion explains our views on this subject. The EPC does not provide a “specificity” or “particularity” requirement, just as it does not offer a “physicality” requirement. Just as with all other inventions across the technical art fields, the claim must be examined as a whole, mindful of EPC explicit requirements such as novelty, inventive step, clarity, etc. We strongly urge the EPO to resist imposing new patentable subject matter requirements not found within the text of the EPC, and essentially fabricated out of whole cloth through Board-made law.
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Question 4

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

(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?

(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?

The President's Referral explains that the fourth question attempts to examine the skills of the technically skilled person programming a computer, concerns the activity (programming), and the resulting product (i.e., computer program). Again, a divergence is alleged, based on the citation of the following decisions which attempt to view the technical aspects of computer programming: T 1177/97, T 172/03, T 833/91, T 204/93, and T 769/92. We respectfully disagree with the framing of the issue as one concerning the scope of patent-eligible subject matter. For the following reasons, it is certain that computer programming involves technical considerations. Accordingly we answer Question 4(a) in the positive.

CompTIA excels as a European voice concerning skillling in the E.U., including assisting in the development of a high tech European Workforce, as explained in our opening remarks. It is evident that the Referral answers this very question itself when it explains that a spectrum of programming languages exist, ranging from low-level languages such as assembly language to modern, high level languages. Hence computer programs as such compromise a genus involving technical considerations, but various species (e.g., programming languages, structures such as loops) must be examined on a case-by-case basis, looking at the claim as a whole. Accordingly we answer Question 4(b) as no.

Robert Southey's child's fable, "Goldilocks and the Three Bears," relates the odyssey of a hapless, poor explorer who attempts navigate a mysterious new milieu. In various renditions of this fable, she encounters, for example, three bowls of porridge, including one too hot and one too cold. In a similar fashion, the Referral attempts to frame an odyssey for computer scientists and other innovators. In essence, the standard for the "technical character" of a computer claim may become entirely elusive and subjective. Remember Justice Potter Stewart who once warned regarding a legal standard, "I know it when I see it." The Referral suggests that some computer programs are too simple or otherwise deficient for the criteria of the EPC and others too sophisticated — "modern (high level) programming languages"— to satisfy technical considerations under the EPC. In contrast to the suggestions of an alleged divergence

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9 Referral at 2.
10 Id. at 12.
in the law and among the Board decisions, the modern European computer programmer is not Goldilocks, and must have certainty surround the criteria for patentable subject matter.

In sum, computer programming comprises a wide range of activities, tasks, and effects. The Referral acknowledges the spectrum of activity that underlies this dynamic, constantly changing industry sector. This inquiry requires a full assessment and understanding of the claimed invention as a whole, and whether a single feature or a combination of features acting in concert to manifest the technical character of the claimed invention.
III. Conclusion

In conclusion, we invite your attention to the following passages that we hope animate the Board’s jurisprudence as it considers these very important questions:

First, the EPO has eloquently explained the ongoing evolution of the patent system:

The patent system evolved gradually over several centuries. The first patent law was enacted in Venice in the fifteenth century, where the concept evolved throughout Europe and over time to other parts of the globe. . . This classic model was a dynamic one, as the diffusion both technology and knowledge spurred further technological innovation, development and progress, so creating a ‘virtuous circle’ . . . Over time the patent system has been exceeded in several dimensions: (i) new areas being covered by patents . . . In addition, the boundaries between different forms of IP have become increasingly porous.11

Second, in a recent U.S. patent law case concerning very similar themes about the scope of patentable subject matter, Judge Pauline Newman, of the U.S. Court of Appeals for the Federal Circuit expressed the following cautionary views. She wrote:

The innovations of the “knowledge economy” — of “digital prosperity” — have been dominant contributors to today’s economic growth and societal change. Revision of the commercial structure affecting major aspects of today’s industry should be approached with care . . . Uncertainty is the enemy of innovation. These new uncertainties not only diminish the incentives available to new enterprise, but disrupt the settled expectations of those who relied on the law as it existed . . . Whether the applications of physics and chemistry that are manifested in advances in computer hardware and software were more or less foreseeable than the advances in biology and biotechnology is debatable, but it is not debatable that these fields of endeavor have become primary contributors to today’s economy and culture, as well as offering an untold potential for future advances.12

11 EPO SCENARIOS at 9.
Accordingly we trust the EPO will pursue any clarifications or revisions in the law surrounding the patentability of computer-implemented inventions and the contours of the examination policy with the foresight and wisdom that European innovators and its workforce deserve. The 21st century is about the knowledge economy and thus it offers the hope of a bright digital prosperity and great opportunities for European at home and across the globe.

Please do not hesitate to contact CompTIA if you have further questions.

Sincerely,

Christos J. Katopis

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