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**Datasheet for the decision  
of 10 February 2015**

**Case Number:** T 0233/12 - 3.5.06

**Application Number:** 07103013.4

**Publication Number:** 1879107

**IPC:** G06F9/455

**Language of the proceedings:** EN

**Title of invention:**

System, method and computer readable medium for virtual machine instantiation

**Applicant:**

Novell, Inc.

**Headword:**

Virtual machine instantiation/NOVELL

**Relevant legal provisions:**

EPC 1973 Art. 111(1), 113(1)  
EPC R. 103(1)(a), 111(2), 137(3)

**Keyword:**

Substantial procedural violation - appealed decision sufficiently reasoned (no) - violation of the right to be heard (yes)  
Discretionary decision - unreasonably exercised (yes)  
Reimbursement of appeal fee - (yes)  
Remittal to the department of first instance - (yes)

**Decisions cited:**

G 0007/93, J 0007/82, T 0246/08

**Catchword:**



**Beschwerdekammern  
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Case Number: T 0233/12 - 3.5.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.06**  
**of 10 February 2015**

**Appellant:** Novell, Inc.  
(Applicant) 1800 South Novell Place  
Provo,  
Utah 84606-6194 (US)

**Representative:** Hanna, Peter William Derek  
Hanna Moore & Curley  
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**Decision under appeal:** **Decision of the Examining Division of the European Patent Office posted on 14 September 2011 refusing European patent application No. 07103013.4 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** W. Sekretaruk  
**Members:** M. Müller  
A. Teale

## Summary of Facts and Submissions

- I. The appeal lies against the decision of the examining division to refuse European patent application No. 07103013.4.
- II. The decision was delivered during oral proceedings. In preparation for them, the applicant had filed amended claims along with corresponding arguments. At the oral proceedings however no one was present for the applicant. The examining division considered that the proposed amendments "prima facie [...] contradict[ed] the requirements of Articles 84 EPC and/or 123(2) EPC" and therefore did not give its "consent to the proposed amendments under Rule 137 (3) EPC". The application was then refused under Article 97 (2) EPC with reference to Article 78 (1) (c) EPC.
- III. The applicant filed its notice of appeal against this decision on 17 November 2011 and paid the appeal fee on the same day. A statement of grounds of appeal was received on 13 January 2012. The appellant requested that the decision be set aside and that the application either be allowed to grant or returned to the examining division to continue the examination proceedings. Oral proceedings were requested before an adverse decision were to issue.
- IV. Claim 1 as originally filed reads as follows:  
  
"A method of instantiating a virtual machine in a host computer system (600,601), comprising:  
    detecting (504) attachment of a physical peripheral device to a peripheral terminal;

evaluating (506,508) the physical peripheral device to determine if a virtual machine image (475) is composed thereon;

responsive to determining the physical peripheral device has the virtual machine image composed thereon, reading (512) the virtual machine image from the physical peripheral device; and

instantiating (514) a first virtual machine according to the virtual machine image."

Claim 1 as filed on 8 December 2009 differs from original claim 1 by the addition of the following features at the end:

"[...] detecting detachment of the physical peripheral device from the peripheral terminal;

determining if the detached physical peripheral device is associated with the first virtual machine; and

responsive to determining the detached physical device is associated with the first virtual machine, de-allocating the first virtual machine associated with the detached physical peripheral device."

Claim 1 as filed on 23 March 2011 and as subject to the refusal reads as follows. The amendments over previous claim 1 are marked:

"A method of instantiating a virtual machine in a host computer system (600,601), comprising:

detecting (504) attachment of a physical peripheral device to a peripheral terminal;

evaluating (506,508) the physical peripheral device to determine if a virtual machine image (475) is composed thereon;

responsive to determining the physical peripheral device has the virtual machine image composed thereon, reading (512) the virtual machine image from the physical peripheral device;

instantiating (514) a first virtual machine according to the virtual machine image by allocating an instance of an operating system (670) and one or more applications (680) each defined by the virtual machine image;

detecting detachment of a physical peripheral device from the peripheral terminal;

determining if the detached physical peripheral device is associated with ~~the first~~ a virtual machine; and

responsive to determining the detached physical peripheral device is associated with ~~the first~~ a virtual machine, de-allocating the ~~first~~ virtual machine associated with the detached physical peripheral device."

Apart from an independent method claim, the sets of claims each contain an independent computer system claim and a claim meant to cover the "physical peripheral device" as referred to in the method and computer system claims. Their precise wording is not material to this decision.

## **Reasons for the Decision**

### *The invention*

1. The application relates to the extension of a host system by portable peripheral devices such as USB sticks with on-board operating systems or other computing applications (see para. 2). When such a device is

coupled to the computing system, the necessary computing resources must be allocated (para. 3). The application explains that this resource management has become increasingly difficult due to the fact that several such peripheral devices may be coupled to a host system at the same time and that they may be added or removed freely (*loc. cit.*), *i.e.* independently from one another and in an arbitrary order.

- 1.1 In order to support several such peripheral devices at the same time, the host system uses "virtualization" (para. 19). For each device, a so-called virtual machine is provided, *i.e.* an execution environment for running the operating system and the applications contained on the device. Multiple virtual machines run in isolation of each other (para. 19). The virtual machine for a particular device is "instantiated" on the host system "from an image maintained on the [...] device" (para. 20).
- 1.2 The host system is equipped to monitor the attachment and removal of USB devices (para. 29). When a new "plugin event" is detected, the host checks whether the pertinent USB device includes a virtual machine image. If so, a virtual machine is instantiated on the host system from that image (see para. 29; p. 8, lines 14-20). Whenever another USB plugin event is detected, this procedure is repeated for the newly attached USB device (para. 30).
- 1.3 When the host system detects the detachment of a peripheral device, it checks whether the detached device is "associated with a virtual machine" (para. 31). If this is the case, the associated virtual machine is de-allocated (para. 32).

*The claims*

2. The original claims were directed towards the instantiation of a virtual machine in response to the detection of an attachment event.
- 2.1 During examination, the claims were amended to also include the detachment events. The corresponding claims, on file before the summons to oral proceedings, covered the attachment and detachment events for a single peripheral device due to the use of the determinate article "the" in several places. The relevant passages in claim 1 are "... detecting attachment of a [...] device ... determining detachment of the [...] device" and "determining if the detached [...] device is associated with the first virtual machine" (emphasis by the board).
- 2.2 In preparation for the oral proceedings before the examining division, with the letter dated 23 March 2011, the applicant filed amended claims which were slightly generalized over the previous claims by replacement of some occurrences of "the" by "a". The relevant passages in amended claim 1 are "determining detachment of a [...] device" and "determining if the detached [...] device is associated with a first virtual machine" (emphasis by the board). For the complete claim language see point IV above.
- 2.3 The appellant argued that the amendments were disclosed in the application as originally filed. Particular reference was made to paragraphs 29-31 and figure 7, and also to paragraphs 26 and 34 (see letter dated 23 March 2011, p. 2, last para.).



*Reasons in the decision under appeal  
for not admitting the last set of claims*

3. The examining division took issue with this last amendment, arguing as follows (see decision; p. 2, 4th para. from the bottom):

"The new wording of the claim is broader than the previous wording as it e.g. covers the situation where a virtual machine is associated with a physical peripheral device *different* from the device used to originally instantiate the virtual machine. The expanded scope of the claims is not supported by the description, which discloses no such embodiment. The proposed amendments therefore appears, *prima facie*, to contradict the requirements of Articles 84 and/or Article 123(2) EPC".

Based on this *prima facie* assessment, for which no further reasons were given, the examining division decided not to admit the latest amendments and, there being no other request, to refuse the application.

*Deficiencies of the decision*

4. The board first notes that Article 123 (2) EPC prohibits amendments to claims from going beyond the content of the application *as filed*. Since the "previous wording" of the claims was different from their wording as filed, the observation in the decision that "the claim is broader than the previous wording" cannot by itself justify the objection under Article 123 (2) EPC. Article 84 EPC 1973 requires that the claims be supported by the description, be it in their wording as filed or in an amended version. The observation that the claims were "broader than the previous wording" is

therefore immaterial to the question of compliance with Article 84 EPC 1973.

5. The reasoning of the examining division relies on a short phrase specifying a situation allegedly applying to the new claims and the assertion that the description did not disclose or support it.
- 5.1 The specified situation is that a peripheral device could be "associated" with a virtual machine which had been instantiated in response to the attachment of another peripheral device.
- 5.1.1 The board notes that neither the claims nor the description defines explicitly the concept of "association" between a virtual machine and a peripheral device. The description refers to devices being "associated" with virtual machines in paragraph 31 of the description which sets out the detachment procedure, and in figure 7. Since the detachment is clearly meant to be the inverse of the attachment procedure as set out in paragraph 30, the board finds it unambiguously clear from the description that a peripheral device is meant to be "associated with" the virtual machine which was instantiated from it. There is no indication anywhere in the description that this "association" could or should be changed. The skilled person would therefore understand from the description that a peripheral device will be "associated" with one and the same virtual machine as long as it remains attached to the host system. Hence, whenever a peripheral device is detached, the virtual machine to be de-allocated can only be the one that was instantiated when that peripheral device was previously attached.

- 5.1.2 The board thus considers that, on a proper construction of the claims in view of the description, the skilled person would not have considered the claims to cover the above-mentioned situation. The board can only speculate that the examining division considered that situation to be a theoretically possible instance of the claims on file due to the vague concept of "association". However, the examining division did not discuss the claimed term "associated" in the decision at all, let alone explain why it had to be construed and how and why a particular interpretation was justified.
- 5.1.3 The board concludes that the decision does not satisfactorily explain why the above-mentioned situation was thought by the examining division to be covered by the claims on file. As a consequence, the board considers the decision to be insufficiently reasoned, Rule 111 (2) EPC 1973.
- 5.2 Furthermore, the decision merely asserts that the situation in question was not supported by the description without further explanation.
- 5.2.1 The appellant had explained in its submission of 23 March 2011 what the amendments were meant to express and where the amendments had a basis in the application as originally filed, in particular by reference to paragraphs 29-31.
- 5.2.2 The right to be heard under Article 113 (1) EPC is not just a right to present comments but also to have those comments duly considered (see e.g. J 7/82, OJ 1982, 391, and T 246/08, reasons 2.2).

5.2.3 Accordingly, the examining division should have explained why the passages indicated by the appellant did not support the amendment at issue. The fact that it did not amounts to a violation of the right to be heard under Article 113 (1) EPC.

*The discretionary decision*

6. Rule 137 (3) EPC states that any second and "further amendment" to the description, claims and drawings requires the consent of the examining division. This makes admission of such a further amendment a matter of discretion for the examining division.

6.1 According to G 7/93 (OJ 1994, 775; reasons 2.6), if an applicant appeals against a discretionary decision of an examining division not to admit amendments under Rule 86 (3) EPC 1973 (or, correspondingly, Rule 137 (3) EPC), it is not the function of a board of appeal to decide whether or not it would have exercised such discretion in the same way as the first instance department. Rather, the board should only overrule the way in which a first instance department has exercised its discretion if it comes to the conclusion either that the first instance department in its decision has not exercised its discretion in accordance with the right principles, or that it has exercised its discretion in an unreasonable way, and has thus exceeded the proper limits of its discretion.

6.2 The criterion that an amended set of claims is *prima facie* not allowable is, in general, an accepted principle (amongst others) to be taken into account in the assessment of whether consent under Rule 137 (3) EPC should be given to the amendment.

- 6.3 While a *prima facie* finding that a claim is not allowable may, by its very nature, be justified in briefer terms than a fully reasoned conclusion, the reasons for a *prima facie* finding may not be so short as to reduce the finding to a mere allegation. Moreover, the amount of reasoning required to justify a *prima facie* finding is amongst the parameters which the examining division has to balance in view of the circumstances of each individual case when exercising its discretion.
- 6.4 In particular, if, as in this case, an applicant files an amendment together with arguments as to why the amendment, in its view, satisfies a particular requirement of the EPC, the examining division cannot merely assert the contrary without giving an indication as to why the applicant's argument fails. That is, a *prima facie* finding must not simply ignore the arguments on file which appear to directly contradict it.
- 6.5 The board therefore concludes that the examining division has not exercised its discretion under Rule 137 (3) EPC in a reasonable way.
7. For the above reasons, the decision under appeal must be set aside. Since the decision was exclusively based on the fact that, once the only request had not been admitted, there was no set of claims to decide upon and in particular did not contain any assessment of the substantive merits of the application, the board exercises its discretion under Article 111 (1) EPC 1973 and remits the case to the department of first instance for further prosecution. Finally, the deficiencies under Article 113 (1) EPC and Rule 111 (2) EPC 1973 make the reimbursement of the appeal fee under Rule 103 (1) (a) EPC equitable.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution.
3. The appeal fee is to be reimbursed.

The Registrar:

The Chairman:



B. Atienza Vivancos

W. Sekretaruk

Decision electronically authenticated