



PATENTS ACT 1977

APPLICANT VMware Inc

ISSUE Whether patent application number
GB0821774.7 complies with section
1(1)(b)

HEARING OFFICER H Jones

DECISION

This decision was given orally. The attached is a note of the hearing as approved by the hearing officer. Hearing held by teleconference on 23rd April 2012.

Introduction

- 1 Present at the hearing were Mr Mark Simms (examiner), Mr Ian Robinson (attorney for applicants VMware, Inc.), Mr Huw Jones (Hearing Officer) and Dr Susan Dewar (hearing assistant). Mr Jones confirmed that the only issue to decide was whether the claims of patent application GB0821774.7 involve an inventive step and therefore satisfy the requirements of section 1(1)(b). He also confirmed that the application currently has two independent claims: an apparatus claim, claim 1 and a broader method claim, claim 12.

Examiner's argument

- 2 Mr Simms began by summarising his inventive step objection. He explained that the invention is concerned with installing software on a computer system and resolving any dependencies that arise by making copies of dependant resources. He explained that the first four cited documents D1-D4 disclose installing software and making copies of dependant resources. The main difference between that disclosed in D1-D4 and the current invention is the way the invention handles multiple dependencies. However, he asserted that handling multiple dependencies is well known in the art as illustrated in further documents D5-D14.

Mr Robinson's argument

- 3 Mr Robinson began by discussing documents D1-D4, of which D1 is most relevant to the current invention. In D1, in a pre-operating system environment, copies are

made of a library resource into the private space of multiple applications. Each application therefore has its own private copy of the required section of code.

- 4 He explained that the current invention is best explained with reference to Fig. 6 of the application which illustrates the problem and Fig. 7 which provides the inventive solution. In Fig. 6 multiple applications run in the same runtime (execution) environment and compete with each other for resources. Application 1 is installed first and is linked to library resource Spring which in turn is linked to an early version of a second resource Hibernate. A second application, application 1 also depends on Spring but requires a second version of Hibernate. A conflict therefore arises.
- 5 Mr Robinson went on to discuss the further documents D5-D14. He explained that some of these documents disclose the problem outlined in Fig. 6 of the current application. For example in US '542 a conflict checker determines that two packages will conflict during runtime and presents a message to the user so that the conflict can be resolved. US '392 describes checking for conflicts but the problem is resolved by uninstalling the conflicting software. He confirmed that in all of these documents the conflict is resolved by removing one of the conflicting components.
- 6 Mr Robinson then returned to the invention, as illustrated in Fig 7. To resolve the conflict, resource Spring is cloned and the second application is linked to the clone allowing the cloned version of Spring to depend on the different version of Hibernate.
- 7 Mr Robinson conceded that documents D1-D4 illustrate that copying library resources is known. However, they do not disclose copying due to a conflict. He also made the point that in each the resource is copied into a private space, available to only one application. He also confirmed that documents D5-D14 disclose the problem of resolving dependencies in a computer system. However none discloses cloning a resource to resolve the dependencies. He concluded that combining any of documents D1-D4 with any of D5-D14 does not render the claims obvious. D5-D14 teach away from the solution provided by the invention; D1-D4 do not consider conflict.

Decision

- 8 Mr Jones concluded that claim 1 does involve an inventive step and satisfies the requirements of section 1(1)(b). He also concluded that claim 12 would be patentable if it were amended to include two features present in claim 1, i.e. the first resource is pinned to a second resource by wiring and the method comprises creating a clone of the first resource in response to the trigger condition. Mr Robinson agreed to make these amendments (along with some minor voluntary amendments to the description) within two weeks of the hearing. On satisfactory receipt of these amendments, the application can proceed to grant.

H JONES

Deputy Director, acting for the Comptroller