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Published:

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(88) Date of publication of the international search report:

18 December 2008

(54) Title: METHOD FOR ENSURING UNIQUE IDENTIFICATION OF PROGRAM ELEMENTS ACROSS MULTIPLE EXECUTIONS

Fig 4

(57) Abstract: Method for allowing invariant identification of selected objects displayed during the execution of an object based application, by another application. According to the proposed method, a tag generator is determined, for uniquely tagging each of the selected objects and then the tag generator generates a plurality of different and unique tags. Access of object generating functions in the source code of the application, to a collection of different and unique tags is established. A unique tag from that collection is automatically attached to the object, such that the attached tag is added to the attributes of the selected object, whenever a selected object that should be invariantly identified is generated during the execution of the application. This way, the another application is allowed to identify and access one or more objects through an interface of the application, according to their corresponding unique tags, which are invariant across all application invocations and updates.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. G06F9/44 G06F9/46

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>X</td>
<td>US 2006/020578 A1 (HOOD GAVAN W [AU]) 26 January 2006 (2006-01-26) paragraphs [0013], [0037], [0045], [0048], [0058], [0060] figure 1</td>
<td>1-4, 6, 10, 12</td>
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**X** Further documents are listed in the continuation of Box C. **X** See patent family annex.

* Special categories of cited documents:

'A' document defining the general state of the art which is not considered to be of particular relevance

'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

'E' earlier document but published on or after the international filing date

'O' document referring to an oral disclosure, use, exhibition or other means

'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

'P' document published prior to the international filing date but later than the priority date claimed

'It' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

'Y' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

'S' document member of the same patent family

**Date of the actual completion of the international search**

29 September 2008

**Date of mailing of the international search report**

14/10/2008

**Name and mailing address of the ISA/Authorized officer**

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### INTERNATIONAL SEARCH REPORT

**Box No. II** 
Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [ ] Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. [ ] Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. [X] Claims Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III** 
Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

> see additional sheet

1. [X] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. [ ] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

[ ] The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[X] No protest accompanied the payment of additional search fees.

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Form PCT/ISA/210 (continuation of first sheet (2)) (April 2005)
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7, 10-12

1.1. claims: 1-6, 10-12

The first invention, as defined by dependent claim 5, consists in determining the unique tags to be associated to objects generated during the execution of an object-based application according to the hierarchy of their corresponding objects with respect to other objects. It is noted that the first invention has been identified as being defined by dependent claim 5, since the method defined in independent claim 1 is not new (see cited passages of US2006/020578, hereinafter referred to as D1) and the subject-matter of the other dependent claims of this group, i.e. claims 2-4, 6 and 10-12, is either not new in view of D1 or obvious taking additionally into account the common general knowledge of a skilled person.

1.2. claim: 7

The second invention, as defined by dependent claim 7, consists in generating the unique tags to be associated to the application's objects in XML documents (the application being a browser).

2. claims: 8,9

The third invention, as defined by dependent claim 8, consists in a particular embodiment of the method of claim 1, wherein the association of unique tags to the application's objects is carried out in an indirect manner by selecting a unique tag for a first event associated with the generation of an object and defining a second event when the unique tag is associated with the object.
<table>
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<tr>
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<td>EP 1662380 A2</td>
<td>31-05-2006</td>
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<td>US 2005234980 A1</td>
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