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(54) **Title:** METHODS AND APPARATUS FOR EVENT DISTRIBUTION IN MESSAGING SYSTEMS

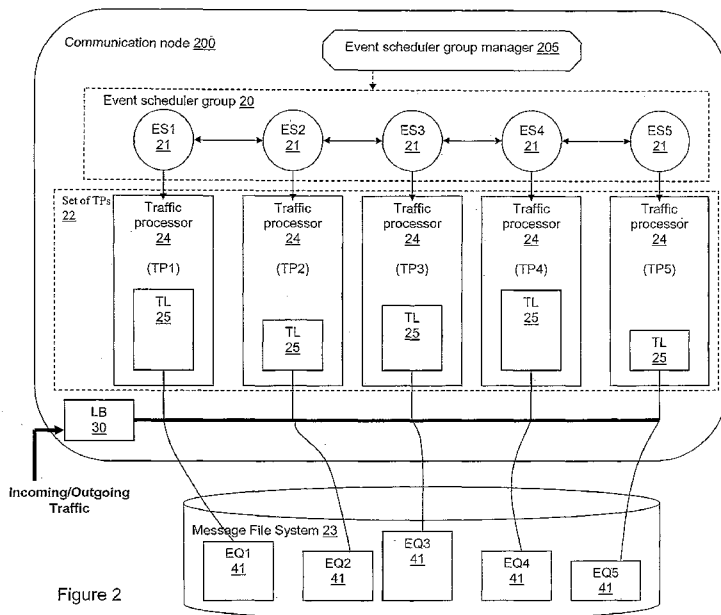


Figure 2

(57) **Abstract:** Methods and apparatus for distributing events among a set of traffic processors in a telecommunication network. The methods and apparatus determines a traffic processor from the set of traffic processors with the lowest traffic load, the traffic load is determined for each traffic processor of the set of traffic processors based on a weighting factor, an event queue length of a traffic processors and a current traffic load. Events are re-distributed when a change occurs in the set of traffic processors. The re-distribution is based on a determination of an allowable event queue length for each traffic processor of the set of traffic processors, which is based on the current traffic load, an optimal traffic load and a maximum event queue length.

# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G06F9/50

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, INSPEC

| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b> |  |                       |
|---|--|-----------------------|
| Category*                                     | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
| X   | US 4 577 272 A (BALLEW JAMES D [US] ET AL)<br>18 March 1986 (1986-03-18)<br>abstract<br>column 3, line 37 - line 46<br>column 3, line 64 - column 4, line 13<br>column 4, line 31 - line 46<br>column 5, line 67 - column 6, line 43;<br>figure 7<br>column 6, line 65 - column 7, line 4<br>-----<br>-/-- | 1-25                  |

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| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.  | <input checked="" type="checkbox"/> See patent family annex.  |   |   |
| * Special categories of cited documents :<br><table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;">                     *A* document defining the general state of the art which is not considered to be of particular relevance<br/>                     *E* earlier document but published on or after the international filing date<br/>                     *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)<br/>                     *O* document referring to an oral disclosure, use, exhibition or other means<br/>                     *P* document published prior to the international filing date but later than the priority date claimed                 </td> <td style="width: 50%; border: none; vertical-align: top;">                     *T* 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<br/>                     *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<br/>                     *Y* document of particular relevance; the claimed invention 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.<br/>                     *&amp;* document member of the same patent family                 </td> </tr> </table> |   | *A* document defining the general state of the art which is not considered to be of particular relevance<br>*E* earlier document but published on or after the international filing date<br>*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)<br>*O* document referring to an oral disclosure, use, exhibition or other means<br>*P* document published prior to the international filing date but later than the priority date claimed | *T* 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<br>*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<br>*Y* document of particular relevance; the claimed invention 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.<br>*&* document member of the same patent family |
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| Date of the actual completion of the international search<br><br><b>4 September 2009</b>  | Date of mailing of the international search report<br><br><b>21/09/2009</b>   |   |   |
| Name and mailing address of the ISA/<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040,<br>Fax: (+31-70) 340-3016  | Authorized officer<br><br><b>Ross, Christopher</b>  |   |   |

## INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
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| X         | <p>ISHFAQ AHMAD: "A MASSIVELY PARALLEL FAULT-TOLERANT ARCHITECTURE FOR TIME-CRITICAL COMPUTING" JOURNAL OF SUPERCOMPUTING, KLUWER ACADEMIC PUBLISHERS, DORDRECHT, NL, vol. 9, no. 1/02, 1 January 1995 (1995-01-01), pages 135-162, XP000521886 ISSN: 0920-8542 abstract page 138, line 7 - page 139, line 17 Sections 5.2 and 5.3: page 148 - page 149</p>  | 1,2,7, 10,16, 20,21   |
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| A         | <p>VARVARIGOU T A ET AL: "DISTRIBUTED RECONFIGURATION OF MULTIPROCESSOR SYSTEMS" PROCEEDINGS OF THE SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS. DANA POINT, OCT. 25 - 27, 1994; [PROCEEDINGS OF THE SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS], LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. SYMP. 13, 25 October 1994 (1994-10-25), pages 212-221, XP000533659 ISBN: 978-0-8186-6577-6 abstract</p> | 1-25                  |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2008/055052

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| US 4577272                                | A                   | NONE                       |                     |