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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

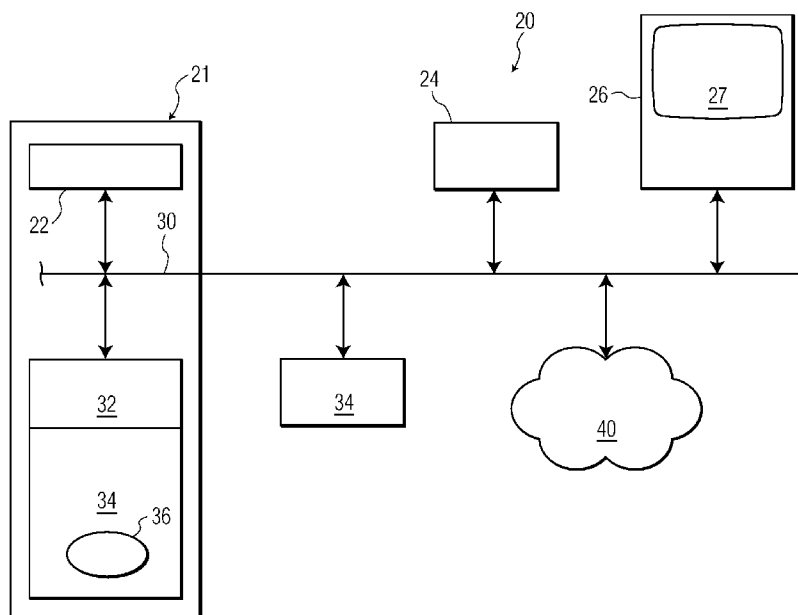
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[Continued on next page]

(54) Title: DEVELOPMENT OF ASSERTIONS FOR INTEGRATED CIRCUIT DESIGN SIMULATION



(57) Abstract: One embodiment of the present application includes the preparation of an assertion for inclusion in an integrated circuit simulation performed with a processing device (21). In response to an input to this processing device (21), a set of integrated circuit waveforms are defined to test the assertion. The processing device (21) tests the assertion with these waveforms; and after successful testing, the integrated circuit simulation is performed with the assertion.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2006/053218

A. CLASSIFICATION OF SUBJECT MATTER INV. G06F17/50		
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		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MAISNIEMI: "Assertion-Based Verification with PSL Integrated with an Existing RTL Verification Environment" PSL/SUGAR CONSORTIUM MEETING IN DATE'04, [Online] 19 February 2004 (2004-02-19), pages 1-5, XP002437934 CNIT, La Defense, Paris, Durer Room, Level D Retrieved from the Internet: URL: http://www.pslsugar.org/papers/PSLSUGAR_paper.pdf [retrieved on 2007-06-15] page 1, right-hand column - page 3, right-hand column	1-12
Y	US 2005/028035 A1 (CHADHA SUNDEEP [US] ET AL) 3 February 2005 (2005-02-03) paragraph [0033] - paragraph [0048] ----- -/--	1-12
<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 :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *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) *O* document referring to an oral disclosure, use, exhibition or other means *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 *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 *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. *&* document member of the same patent family
Date of the actual completion of the international search 15 June 2007		Date of mailing of the international search report 31/08/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer ALONSO NOGUEIRO, L

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International application No

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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.
A	<p>PERYER M ET AL: "A path out of the verification wilderness" ELECTRONICS SYSTEMS AND SOFTWARE, vol. 2, no. 2, May 2004 (2004-05), pages 33-37, XP002437935 IET page 35 - page 37</p> <p>-----</p>	1-12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2006/053218

Box 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. 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 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. 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 fee, this Authority did not invite payment of any additional fee.

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.:

1-12

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

Method comprising applying first assertion to circuit waveforms, evaluating first assertion, modifying the assertion into a second assertion wherein the waveforms are provided in a database.

2. claims: 13-17

System comprising means for testing the operation of one assertion relative to a first set of waveforms, means for visualizing the operation of the assertion further comprising means to generate a second set of waveforms customized to test a different assertion and to evaluate the second assertion.

3. claims: 18-21

Apparatus comprising means for preparing an assertion, means, means to define a set of waveforms to evaluate the assertion, means for providing an output, further comprising means to modify or create one or more of the set of waveforms to perform assertion evaluation.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2006/053218

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005028035	A1	NONE	