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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR COPYING OBJECTS IN AN OBJECT-ORIENTED ENVIRONMENT USING A MULTIPLE-TRANSACTION TECHNIQUE

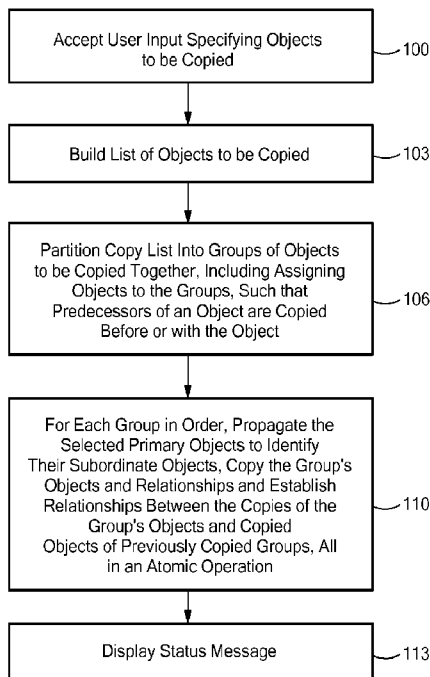


FIG. 1

(57) Abstract: A large number of objects, such as objects representing beams and columns in an object-oriented enterprise engineering system, may be copied in a model database by partitioning the objects according to certain criteria into a number of ordered small copy groups and copying the objects in each group as an atomic operation. Objects that are to be copied are organized into the ordered groups, and the groups are copied in order, such that all predecessors of a given object are copied into the database before, or in the same small operation as, the given object. If a large copy operation abnormally terminates before all the small copy operations have been completed, the model database is, nevertheless, left in a consistent state, and the copy operation may be resumed from the point of interruption. Furthermore, the number of objects that may be copied is not constrained by the amount of memory available in the system.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BATZ T ET AL: "A data model supporting system engineering" COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE, 1988. COMPSAC 88. PROCEEDINGS., TWELFTH INTERNATIONAL CHICAGO, IL, USA 5-7 OCT. 1988, WASHINGTON, DC, USA, IEEE COMPUT. SOC. PR, US, 5 October 1988 (1988-10-05), pages 178-185, XP010013659 ISBN: 978-0-8186-0873-5 section "3.2 Structured Objects" section "3.3 Manipulation of Objects" -----	1-17
A	EP 1 538 537 A (ACCELRYS SOFTWARE INC [US]) 8 June 2005 (2005-06-08) abstract -----	1-17
<input type="checkbox"/> Further documents are listed in the continuation of Box C.		
<input checked="" type="checkbox"/> See patent family annex.		
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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		
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040. Fax: (+31-70) 340-3016	Authorized officer Schmidt, Axel	

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Information on patent family members

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EP 1538537	A	08-06-2005 JP 2005166053 A	23-06-2005