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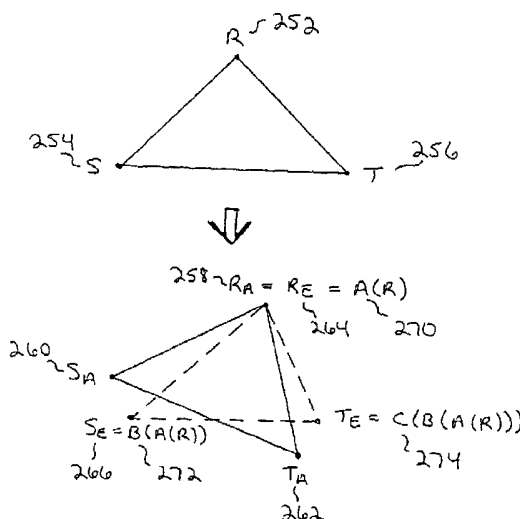
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(54) Title: DATA COMPRESSION THROUGH OFFSET REPRESENTATION



(57) Abstract: A computing-device implemented method for compressing a data model, where such devices include a computer, personal digital assistant (PDA), home appliance, and the like. The data includes bandwidth intensive information such as that used in video conferencing, MPEG and equivalent types of digital video encoding, multi-media data transfers, and interactive gaming. In one implementation, a 3D model has objects defined therein. Each object is defined by plural data points that are transferred from a data provider to a recipient. Typically the provider and recipient are in communication over a network. For a first and a second data point defined in the model, first offsets are determined from the first data point for the second data point. The second data point can then be re-coded in terms of the determined first offsets. The first offsets are coded to require less data storage than required for the first data point, thus allowing them to be transferred more quickly. Second offsets can be cascaded off the first offsets for a third data point defined within the model.



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## INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 G06T9/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 G06T		
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		
<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	DANSKIN J: "HIGHER BANDWIDTH X" ACM MULTIMEDIA, PROCEEDINGS OF THE INTERNATIONAL CONFERENCE, NEW YORK, NY, US, 15 October 1994 (1994-10-15), pages 89-96, XP000618613 page 92, right-hand column, paragraph 2 -page 94, left-hand column, last paragraph ---	1-20
A	EP 0 536 801 A (SPACELABS INC) 14 April 1993 (1993-04-14) abstract; claim 1 ---	1-20
A	EP 0 757 332 A (SUN MICROSYSTEMS INC) 5 February 1997 (1997-02-05) page 7, line 14 - line 21 page 10, line 11 - line 16; claims 1,3 ---	1-20
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in 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  5 August 2002		Date of mailing of the international search report  13/08/2002
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  Pierfederici, A

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 0 889 440 A (SUN MICROSYSTEMS INC) 7 January 1999 (1999-01-07) -----	

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