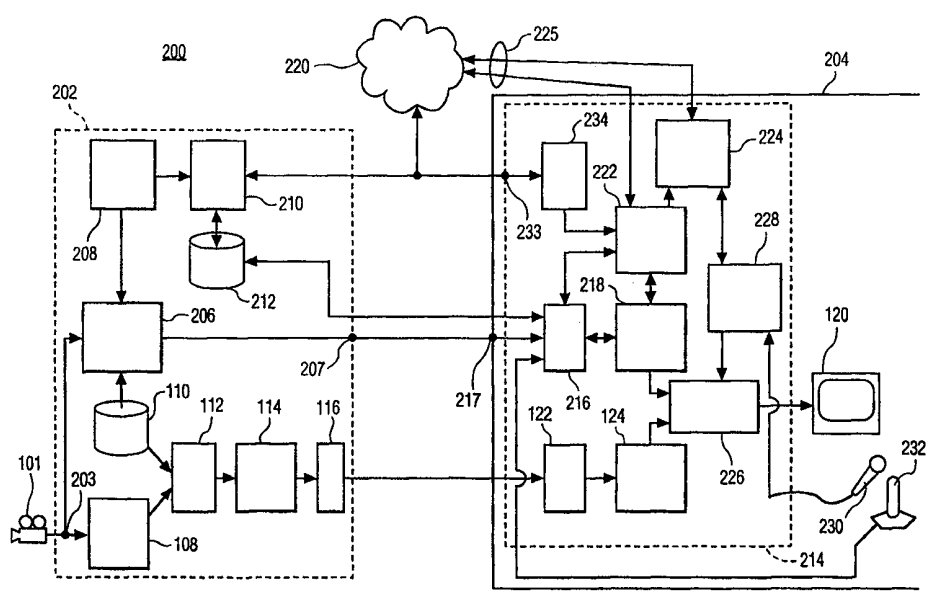




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/IB99/00574 (22) International Filing Date: 1 April 1999 (01.04.99) (30) Priority Data: 09/053,448 10 April 1998 (10.04.98) US (71) Applicant: KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). (71) Applicant (for SE only): PHILIPS AB [SE/SE]; Kottbygatan 7, Kista, S-164 85 Stockholm (SE). (72) Inventors: MALLART, Raoul; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). SINHA, Atul; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). (74) Agent: GROENENDAAL, Antonius, W., M.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).</p>		<p>(81) Designated States: CN, JP, KR, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 29 December 1999 (29.12.99)</p>

(54) Title: GROUP-WISE VIDEO CONFERENCING USES 3D-GRAPHICS MODEL OF BROADCAST EVENT



(57) Abstract
A TV broadcast service to multiple geographically distributed end users is integrated with a conferencing mode. Upon a certain event in the broadcast, specific groups of end users are switched to a conference mode under software control so that the group is enabled to discuss the event. The conference mode is enhanced by a 3D-graphics model of the video representation of the event that is downloaded to the groups. The end users are capable of interacting with the model to discuss alternatives to the event.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 99/00574

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04N 7/15, H04L 12/18

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)

IPC6: H04N, H04L

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

SE,DK,FI,NO classes as above

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

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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.
X	US 5315633 A (JOHN J. CHAMPA), 24 May 1994 (24.05.94), column 1, line 56 - column 2, line 30; column 3, line 56 - column 4, line 5; column 5, line 55 - column 6, line 2, column 7, line 34 - column 8, line 18	1-2,4-6
Y	--	3,7-10
X	"Dynamic, embodied multicast groups in MASSIVE-2", Chris Greenhalgh, Technical Report, Department of ComputerScience The University of Nottingham, December 8, 1996, (retrieved on 99/10/31) Retrieved on the Internet <ORL:www.crg.cs.nott.ac.uk/research/systems/MASSIVE-2> page 5 - page 8	3,7-10
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Date of the actual completion of the international search

2 November 1999

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INTERNATIONAL SEARCH REPORT

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	"The Mirror - reflections on Inhabited TV" Graham Walker, April 1997, (retrived on 31-10-99) Retrived on the Internet, <URL: virtualbusiness.tals.br.com/msss/IBTE_Mirror/ see the whole document --	1-10
A	US 5440624 A (C.JOHN SCHOOF, II), 8 August 1995 (08.08.95), column 9, line 39 - line 50; column 12, line 54 - column 14, line 15, claim 4 --	1-10
P,X	"eTV: a mixed reality interface onto Inhabited TV" Morphett, J.; Jessop, M. Virtual Reality Personal Mobile and Practical Applications (Ref. No. 1998/454), IEE Colloquium on 28 Oct. 1998 see the whole document --	1-10
P	US 5867653 A (CAGLAN M. ARAS ET AL), 2 February 1999 (02.02.99), see the whole document -- -----	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5315633 A	24/05/94	NONE	
US 5440624 A	08/08/95	NONE	
US 5867653 A	02/02/99	NONE	