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(54) Title: PRESENTING A VISUAL DISTRIBUTION OF TELEVISION PROGRAM RECOMMONENDATION SCORES

(57) Abstract: A method and apparatus are disclosed for displaying the visual distribution of recommendation scores assigned to each television program by a television programming recommender. The visual distribution of recommendation scores can be presented to the user using a number of illustrative display formats. The invention defines a number of score ranges and indicates the number of television programs in each score range for a given time interval. Thus, the available programs are clustered based on their program recommendation scores. In addition, the visual presentation of the recommendation score distribution can be further improved by assigning a color to each score range. Thus, for a given time interval, the intensity (or saturation) of the color associated with a score range can be varied to indicate the corresponding number of programs having a recommendation score in the corresponding score range.

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/EP 01/10335

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04N5/445

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)  
IPC 7 H04N

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 854 645 A (TEXAS INSTRUMENTS INCORPORATED) 22 July 1998 (1998-07-22) column 13, line 39 -column 15, line 28 ---	1,2,6,9, 12,13
A	WO 99 45700 A (PREVUE INTERNATIONAL INC.) 10 September 1999 (1999-09-10) page 23, line 1 -page 24, line 22 ---	1,7,9, 12,13
A	US 6 005 597 A (BARRETT D. ET AL) 21 December 1999 (1999-12-21) column 3, line 49 -column 14, line 28 ---	1,2,6,9, 12,13
A	WO 99 65237 A (METABYTE INC.) 16 December 1999 (1999-12-16) page 15, line 22 -page 16, line 8 ---	1,2,6,9, 12,13
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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PCT/EP 01/10335

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 758 257 A (HERZ F. ET AL) 26 May 1998 (1998-05-26) column 17, line 26 -column 19, line 3 ---	1,7,9, 12,13
A	US 6 088 722 A (HERZ F. ET AL) 11 July 2000 (2000-07-11) column 6, line 6 - line 63 ---	1,7,9, 12,13
A	EP 0 822 718 A (DISCOVERY COMMUNICATIONS INC.) 4 February 1998 (1998-02-04) page 24, line 14 -page 28, line 20 page 29, line 22 - line 26 -----	1,7,9, 12,13

**INTERNATIONAL SEARCH REPORT**

information on patent family members

International Application No

PCT/EP 01/10335

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0854645	A	22-07-1998	EP 0854645 A2	22-07-1998
			JP 10207914 A	07-08-1998
			SG 67469 A1	21-09-1999
			TW 435046 B	16-05-2001
			US 6163316 A	19-12-2000
WO 9945700	A	10-09-1999	AU 2879099 A	20-09-1999
			AU 3310499 A	20-09-1999
			BR 9909238 A	14-11-2000
			BR 9909241 A	14-11-2000
			CA 2322217 A1	10-09-1999
			CA 2322536 A1	10-09-1999
			CN 1297648 T	30-05-2001
			CN 1298604 T	06-06-2001
			EP 1058999 A1	13-12-2000
			EP 1060617 A1	20-12-2000
			JP 2002506327 T	26-02-2002
			JP 2002506328 T	26-02-2002
			WO 9945700 A1	10-09-1999
			WO 9945702 A1	10-09-1999
US 6005597	A	21-12-1999	NONE	
WO 9965237	A	16-12-1999	AU 4412299 A	30-12-1999
			EP 1084573 A1	21-03-2001
			WO 9965237 A1	16-12-1999
US 5758257	A	26-05-1998	AU 703247 B2	25-03-1999
			AU 4410396 A	19-06-1996
			CA 2207868 A1	06-06-1996
			EP 0796538 A2	24-09-1997
			US 6020883 A	01-02-2000
			WO 9617467 A2	06-06-1996
			US 5734720 A	31-03-1998
			US 5754938 A	19-05-1998
			US 5754939 A	19-05-1998
			US 5835087 A	10-11-1998
			US 6088722 A	11-07-2000
			US 6029195 A	22-02-2000
US 6088722	A	11-07-2000	US 5758257 A	26-05-1998
			AU 703247 B2	25-03-1999
			AU 4410396 A	19-06-1996
			CA 2207868 A1	06-06-1996
			EP 0796538 A2	24-09-1997
			US 6020883 A	01-02-2000
			WO 9617467 A2	06-06-1996
			US 5734720 A	31-03-1998
			US 5754938 A	19-05-1998
			US 5754939 A	19-05-1998
			US 5835087 A	10-11-1998
			US 6029195 A	22-02-2000
EP 822718	A	04-02-1998	EP 0822718 A1	04-02-1998
			EP 0920208 A1	02-06-1999
			AT 177277 T	15-03-1999
			AT 199294 T	15-03-2001
			AT 176840 T	15-03-1999

# INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/EP 01/10335

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 822718	A	AT 192005 T	15-05-2000
		AT 190180 T	15-03-2000
		AT 183352 T	15-08-1999
		AT 176841 T	15-03-1999
		AT 197366 T	15-11-2000
		AT 214534 T	15-03-2002
		AU 715683 B2	10-02-2000
		AU 4440797 A	29-01-1998
		AU 712157 B2	28-10-1999
		AU 4532597 A	05-02-1998
		AU 693775 B2	09-07-1998
		AU 5732994 A	04-07-1994
		AU 692427 B2	11-06-1998
		AU 5733094 A	04-07-1994
		AU 691479 B2	21-05-1998
		AU 5733194 A	04-07-1994
		AU 692428 B2	11-06-1998
		AU 5733294 A	04-07-1994
		AU 5736394 A	04-07-1994
		AU 5845894 A	22-06-1994
		AU 5869894 A	04-07-1994
		AU 716184 B2	24-02-2000
		AU 6066798 A	04-06-1998
		AU 716182 B2	24-02-2000
		AU 6066898 A	04-06-1998
		BR 9307619 A	15-06-1999
		BR 9307620 A	10-08-1999
		BR 9307621 A	15-06-1999
		BR 9307622 A	15-06-1999
		BR 9307623 A	16-05-2000
		BR 9307624 A	15-06-1999
		BR 9307625 A	31-08-1999
		CA 2151456 A1	23-06-1994
		CA 2151457 A1	23-06-1994
		CA 2151458 A1	23-06-1994
		CA 2151459 A1	23-06-1994
		CA 2151460 A1	23-06-1994
		CA 2151461 A1	09-06-1994
		CA 2151462 A1	23-06-1994
		CN 1259826 A	12-07-2000
		CN 1259827 A	12-07-2000
		CN 1276682 A	13-12-2000
CN 1276683 A	13-12-2000		
CN 1276684 A	13-12-2000		
CN 1276685 A	13-12-2000		