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Manning

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(54) **FOLDING MULTIMEDIA DISPLAY DEVICE**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,110,792	A	8/1978	Long et al.	358/240
4,141,000	A	2/1979	Thomas et al.	340/752
5,128,662	A	7/1992	Failla	340/752
5,379,461	A	1/1995	Wilmers	2/115
5,467,102	A *	11/1995	Kuno et al.	345/1.3
5,790,371	A *	8/1998	Latocha et al.	361/679.32
5,949,643	A	9/1999	Batio	361/681
5,960,442	A	9/1999	Pickering	707/104
6,018,898	A	2/2000	Auty et al.	40/5
6,057,814	A	5/2000	Kalt	345/58
6,076,093	A	6/2000	Pickering	707/104
6,222,507	B1	4/2001	Gouko	345/1
6,320,591	B1 *	11/2001	Griencewic	345/582
6,327,482	B1 *	12/2001	Miyashita	455/566
6,343,006	B1	1/2002	Moscovitch et al.	361/681
6,377,324	B1	4/2002	Katsura	349/58
6,386,974	B1	5/2002	Adams	463/16
6,493,002	B1	12/2002	Christensen	345/779
6,532,146	B1	3/2003	Duquette	361/681
6,628,244	B1	9/2003	Hirosawa et al.	345/2.3
6,643,124	B1	11/2003	Wilk	361/681
6,722,976	B2	4/2004	Adams	463/16
6,750,844	B2 *	6/2004	Nakanishi	345/107
6,762,929	B2	7/2004	Sawyer	361/681
6,771,237	B1	8/2004	Kalt	345/85
6,807,275	B1 *	10/2004	Kubo et al.	379/433.04
6,819,304	B2	11/2004	Branson	345/1.3
6,844,865	B2	1/2005	Stasko	345/1.3
6,850,780	B1	2/2005	Gioscia et al.	455/566
6,859,219	B1	2/2005	Sall	345/905
6,919,864	B1	7/2005	Macor	345/1.1
6,931,265	B2	8/2005	Reyes et al.	455/566
7,091,926	B2	8/2006	Kulas	345/1.1
7,092,247	B2	8/2006	Kim	361/681
7,095,387	B2	8/2006	Lee et al.	345/4
7,138,962	B2	11/2006	Koenig	345/1.3
7,196,676	B2	3/2007	Nakamura et al.	345/1.1
7,371,177	B2 *	5/2008	Ellis et al.	463/42
2001/0054986	A1	12/2001	Leman	345/1.1

(Continued)

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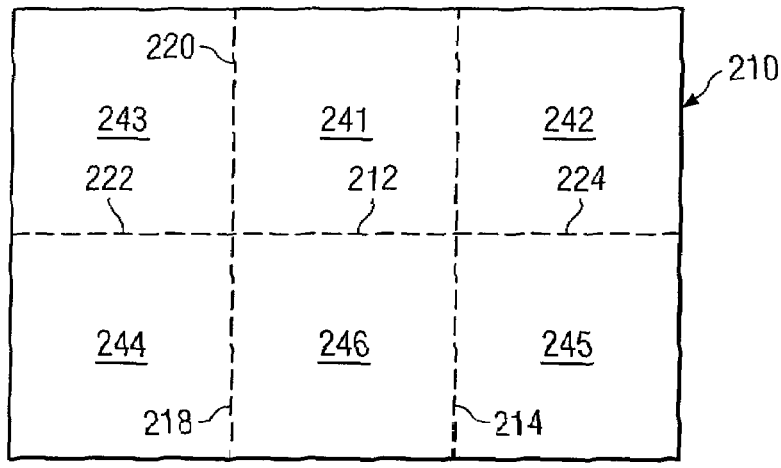
(57) **ABSTRACT**

Various configurations of an electronic display, and devices incorporating the display, are provided. The display may have multiple portions connected along one or more axes, lines, points, or other connecting areas. The portions are movable about the connections. In various configurations, the display portions emulate different media and/or communication and computing devices. Two or more of the display devices may be coupled in an array.

58 Claims, 4 Drawing Sheets