



[54] **PANEL ARRANGEMENT**

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[*] Notice: This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

[63] Continuation of application No. 08/736,512, Oct. 24, 1996, Pat. No. 5,852,904, which is a continuation-in-part of application No. 08/692,344, Aug. 5, 1996, abandoned.

[51] **Int. Cl.**⁷ **E04B 2/74**

[52] **U.S. Cl.** **52/220.7; 52/36.4**

[58] **Field of Search** 52/220.7, 36.1, 52/36.4, 239; 312/223.1, 223.6, 223.3; 439/215, 216, 209

[56] **References Cited**

U.S. PATENT DOCUMENTS

- Re. 27,215 11/1971 Propst et al. .
- Re. 32,890 3/1989 DeFouw et al. .
- 1,176,692 3/1916 Smith .
- 1,854,314 4/1932 Ryan .
- 1,981,240 11/1934 McNeil .
- 2,114,388 4/1938 Killion .
- 2,187,408 1/1940 Thumm .
- 2,969,565 1/1961 Levy .
- 3,195,698 7/1965 Codrea .
- 3,255,563 6/1966 Sauer .
- 3,316,624 5/1967 Brudevold .
- 3,377,756 4/1968 Polhamus .
- 3,428,108 2/1969 Singer .
- 3,461,349 8/1969 Meyer .
- 3,462,892 8/1969 Meyer .

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

- 73715/74 1/1976 Australia .
- 2 075 014 2/1993 Canada .
- 2 662 216 11/1991 France .
- 680 980 A5 12/1992 Switzerland .
- 1 563 890 4/1980 United Kingdom .
- 2 247 257 2/1992 United Kingdom .
- 2 250 759 6/1992 United Kingdom .

OTHER PUBLICATIONS

Article "Innovative construction sets Office Specialty's Platform panel system apart" by Marilyn Zelinsky, Jun. 1995 (2 pages).

Steelcase brochure Montage Product Overview, 1994 (13 pages).

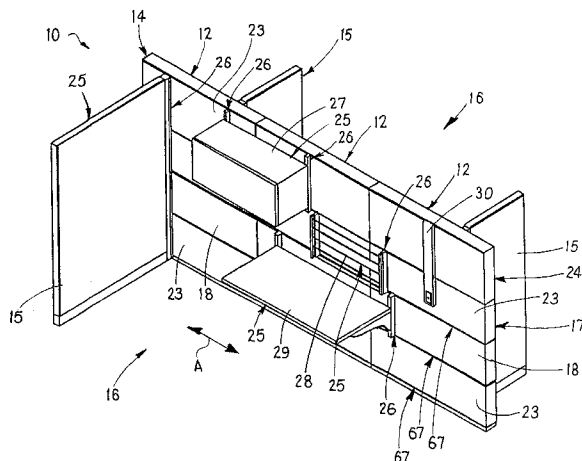
Teknion Furniture Systems Inc. brochure entitled "3 reasons why Teknion could change your mind about office furniture systems.", 1982 (8 pages).

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[57] **ABSTRACT**

A space-dividing wall panel system having a plurality of base panels which are serially connectable one with the other to define a vertically enlarged wall supported on a floor. Each base panel is defined by at least one horizontal box-beam rigidly connected to a pair of laterally spaced apart vertical uprights which are connected at the opposite ends of the box-beam and have a reduced thickness compared thereto. With this clearance between the faces of the box-beam and the uprights, the box-beam, cross rails at the ends of the uprights as well as additional extension panels are formed with longitudinally extending channels which are positioned free of interference with the vertical uprights and aligned with serially-adjacent channels of serially-adjacent wall panels. The channels provide a continuous linear track on the opposite sides of the upright which permit the connection of mounting hooks of furniture components and permit continuous, uninterrupted sliding or adjustment of the furniture components along the entire length of the aligned channels.

20 Claims, 27 Drawing Sheets



U.S. PATENT DOCUMENTS

3,553,916	1/1971	Licklitter et al. .	4,976,080	12/1990	Zegel et al. .
3,567,842	3/1971	Meyer .	4,996,811	3/1991	Dull et al. .
3,585,768	6/1971	Klein .	5,004,371	4/1991	Sorensen .
3,675,382	7/1972	Licklitter et al. .	5,013,112	5/1991	Hellwig .
3,749,432	7/1973	Janssen .	5,024,030	6/1991	Morrison .
3,771,277	11/1973	Rausch et al. .	5,038,539	8/1991	Kelley et al. .
3,802,146	4/1974	Tacke et al. .	5,056,577	10/1991	DeLong et al. .
3,814,833	6/1974	Yamada et al. .	5,058,331	10/1991	Epps .
3,823,251	7/1974	Heithecker et al. .	5,058,347	10/1991	Schuelke et al. .
3,831,330	8/1974	Tacke et al. .	5,062,246	11/1991	Sykes .
3,834,093	9/1974	Tacke et al. .	5,065,556	11/1991	DeLong et al. .
3,856,981	12/1974	Boundy .	5,069,263	12/1991	Edwards .
3,862,524	1/1975	McCrackin .	5,081,808	1/1992	Bastian et al. .
3,909,502	9/1975	Lacan .	5,094,053	3/1992	Miltizer .
3,916,972	11/1975	Breiner .	5,101,606	4/1992	Meru .
4,021,973	5/1977	Hegg et al. .	5,116,235	5/1992	Nienhuis et al. .
4,032,821	6/1977	Keiser .	5,129,835	7/1992	DeFouw et al. .
4,047,342	9/1977	Boulva .	5,134,826	8/1992	La Roche et al. .
4,056,297	11/1977	Gartung .	5,155,955	10/1992	Ball et al. .
4,057,123	11/1977	Erickson .	5,155,960	10/1992	Shaanan .
4,164,618	8/1979	Casasanta .	5,172,529	12/1992	Van De Riet .
4,197,685	4/1980	Goulish et al. .	5,175,969	1/1993	Knauf et al. .
4,200,254	4/1980	Nelson .	5,187,912	2/1993	Hsueh .
4,203,639	5/1980	VandenHoek et al. .	5,195,286	3/1993	DeLong et al. .
4,218,579	8/1980	Joly .	5,195,287	3/1993	Bruggink .
4,229,917	10/1980	Textoris et al. .	5,207,041	5/1993	Wills .
4,255,611	3/1981	Propst et al. .	5,209,035	5/1993	Hodges et al. .
4,257,203	3/1981	Propst et al. .	5,211,502	5/1993	Upham-Hill .
4,269,005	5/1981	Timmons .	5,214,889	6/1993	Nienhuis et al. .
4,278,834	7/1981	Boundy .	5,214,890	6/1993	Levitan et al. .
4,284,840	8/1981	Baker .	5,216,859	6/1993	Moreno et al. .
4,353,411	10/1982	Harter et al. .	5,224,673	7/1993	Webb .
4,370,008	1/1983	Haworth et al. .	5,228,254	7/1993	Honeycutt, Jr. .
4,375,010	2/1983	Mollenkopf .	5,241,796	9/1993	Hellwig et al. .
4,377,724	3/1983	Wilson .	5,251,413	10/1993	Goodman .
4,391,073	7/1983	Mollenkopf et al. .	5,274,970	1/1994	Roberts .
4,395,854	8/1983	White et al. .	5,277,005	1/1994	Hellwig et al. .
4,404,776	9/1983	Ball et al. .	5,277,006	1/1994	Ruster .
4,443,986	4/1984	Propst et al. .	5,277,007	1/1994	Hellwig et al. .
4,448,003	5/1984	Hasbrouck .	5,287,666	2/1994	Frascaroli et al. .
4,457,117	7/1984	Leihar et al. .	5,287,909	2/1994	King et al. .
4,477,128	10/1984	Hasbrouck .	5,325,649	7/1994	Kajiwara .
4,516,619	5/1985	Hasbrouck .	5,326,934	7/1994	LeMaster et al. .
4,535,577	8/1985	Tensor et al. .	5,337,525	8/1994	Zaccai et al. .
4,567,698	2/1986	Morrison .	5,341,615	8/1994	Hodges et al. .
4,571,907	2/1986	DeFouw et al. .	5,347,778	9/1994	Bray .
4,601,137	7/1986	Bates .	5,357,055	10/1994	Sireci .
4,601,145	7/1986	Wilcox .	5,362,923	11/1994	Newhouse et al. .
4,619,486	10/1986	Hannah et al. .	5,363,612	11/1994	Erickson .
4,625,483	12/1986	Zacky et al. .	5,370,488	12/1994	Sykes .
4,631,881	12/1986	Charman .	5,381,994	1/1995	Welch .
4,642,418	2/1987	Menchetti .	5,394,658	3/1995	Schreiner et al. .
4,685,255	8/1987	Kelley .	5,400,560	3/1995	Hellwig et al. .
4,712,336	12/1987	Backer .	5,403,232	4/1995	Helm et al. .
4,716,698	1/1988	Wilson et al. .	5,406,760	4/1995	Edwards .
4,771,583	9/1988	Ball et al. .	5,426,904	6/1995	Gilmore .
4,802,422	2/1989	Beard .	5,428,928	7/1995	Hellwig et al. .
4,821,477	4/1989	Rydgvist .	5,465,541	11/1995	Lin et al. .
4,831,791	5/1989	Ball .	5,474,402	12/1995	Wu .
4,833,848	5/1989	Guerin .	5,479,747	1/1996	Wu .
4,852,317	8/1989	Schiavello et al. .	5,487,246	1/1996	Hodges et al. .
4,874,027	10/1989	Boundy et al. .	5,490,357	2/1996	Lin .
4,876,835	10/1989	Kelley et al. .	5,491,943	2/1996	Vondrejs et al. .
4,881,349	11/1989	Brown et al. .	5,502,930	4/1996	Burkette et al. .
4,881,352	11/1989	Glockenstein .	5,560,418	10/1996	Kissinger .
4,882,885	11/1989	Chatterson et al. .	5,561,960	10/1996	Minnick et al. .
4,891,920	1/1990	Pingston .	5,675,949	10/1997	Forslund et al. .
4,899,018	2/1990	Sireci .	5,740,650	4/1998	Seiber et al. .
4,914,873	4/1990	Newhouse .	5,746,034	5/1998	Luchetti et al. .
4,931,597	6/1990	Kimbrough et al. .	5,746,035	5/1998	Seiber et al. .
4,932,177	6/1990	Hinden .	5,826,385	10/1998	Dykstra et al. .
4,936,066	6/1990	Rütsche et al. .	B1 4,224,769	5/1990	Ball et al. .
4,962,805	10/1990	Allen .	B1 4,876,835	6/1992	Kelly et al. .
4,967,531	11/1990	Giles et al. .			

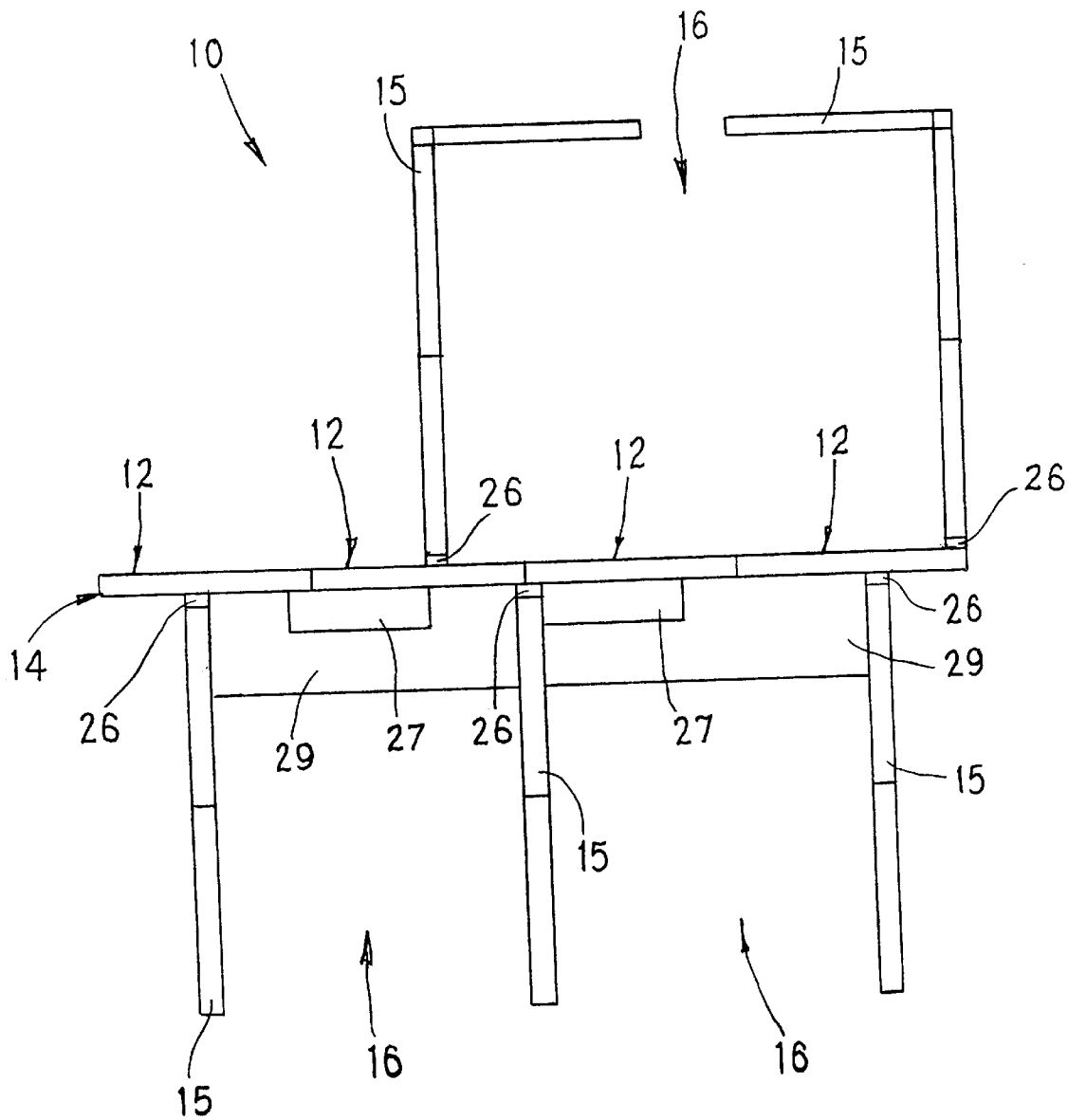


FIG. 1A

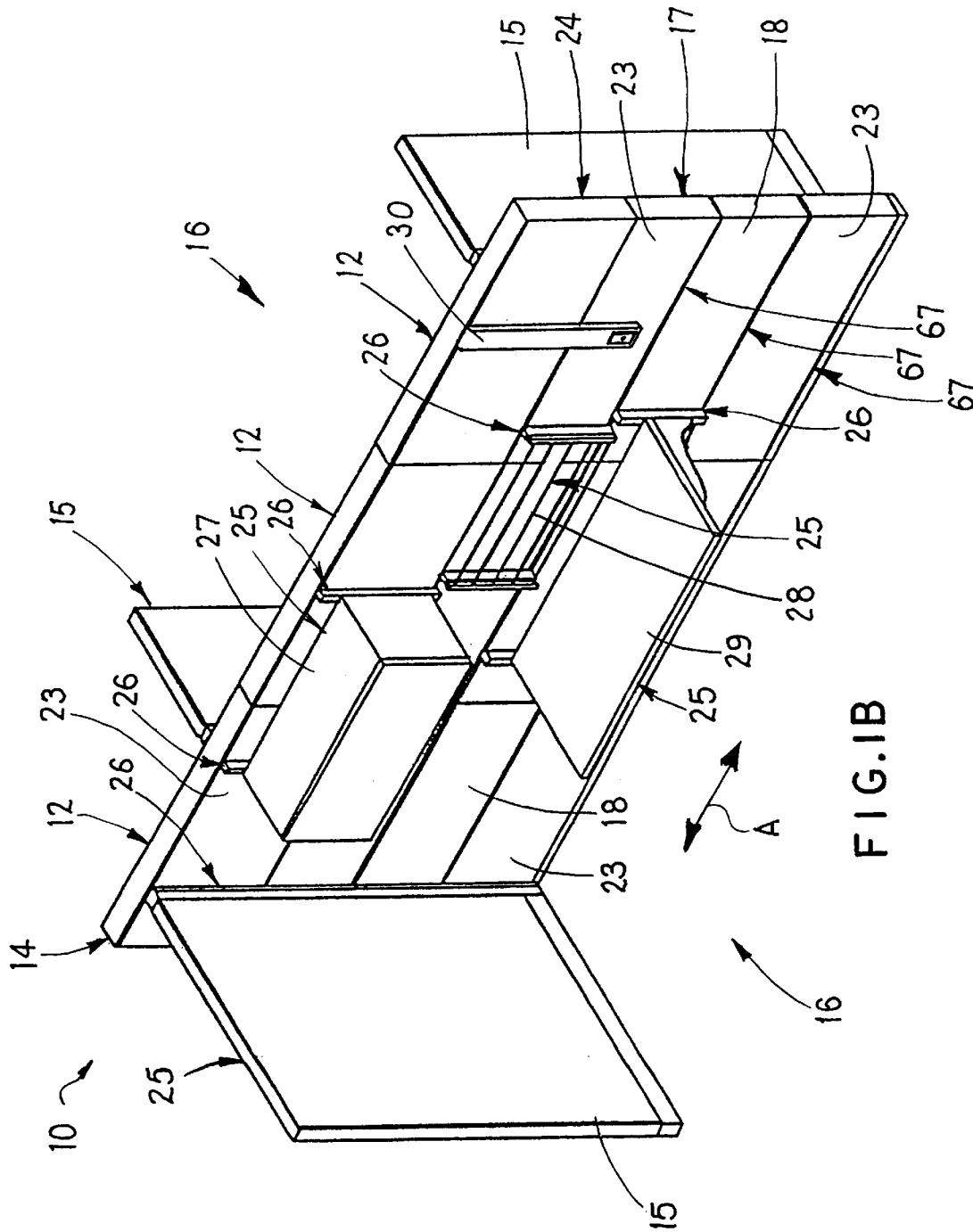


FIG. 1B

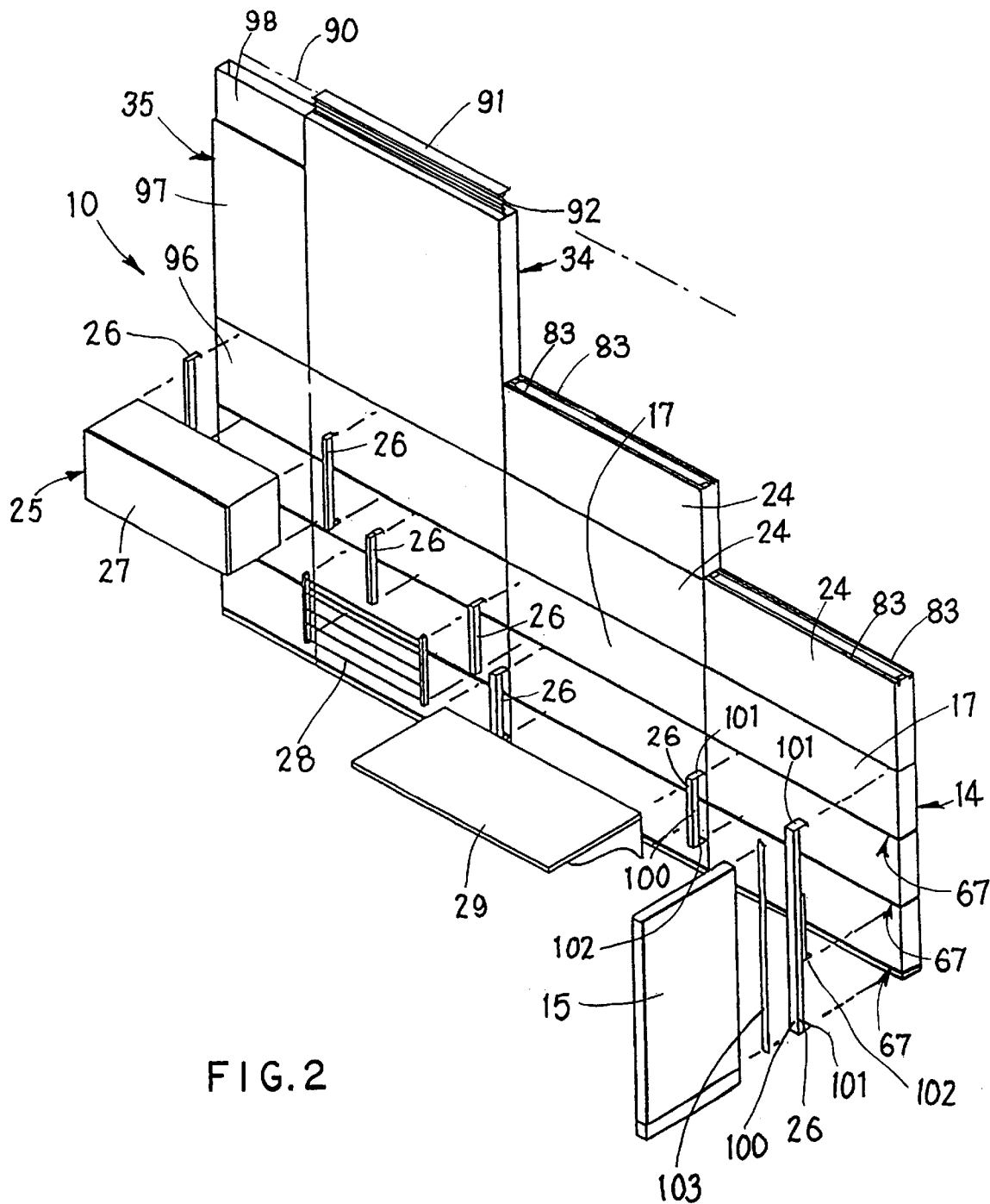


FIG. 2

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