



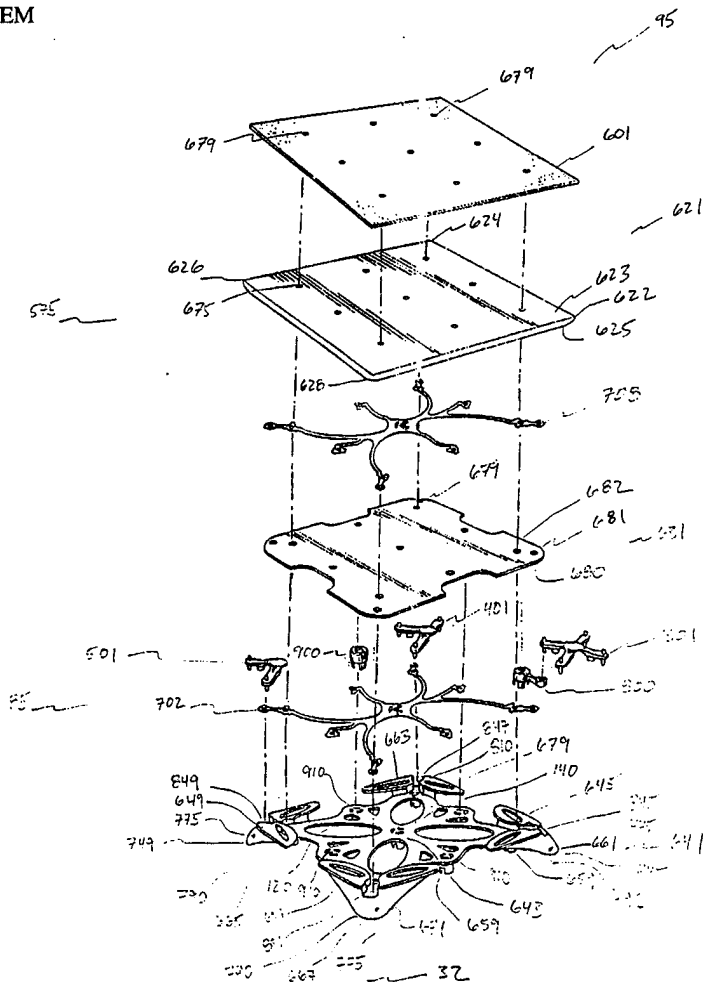
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US97/22633 (22) International Filing Date: 3 December 1997 (03.12.97) (30) Priority Data: 60/032,100 4 December 1996 (04.12.96) US (71) Applicant (for all designated States except US): HERMAN MILLER, INC. [US/US]; 855 East Main Avenue, Zeeland, MI 49464-0302 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): PEART, Stephen [GB/US]; 171 Shelly, Campbell, CA 95008 (US). LOVE-GROVE, Ross [GB/GB]; 21 Powis Mews, London W11 1JN (GB). (74) Agent: PRENDERGAST, William, F.; Brinks Hofer Gilson & Lione, NBC Tower, Suite 3600, 455 North Cityfront Plaza Drive, Chicago, IL 60611-5599 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 20 August 1998 (20.08.98)</p>

(54) Title: MODULAR FLOOR TILES AND FLOOR SYSTEM

(57) Abstract

A modular tile (95) and modular tile system are disclosed. The tile (95) has a horizontal portion (643), upper column members (645, 647, 649, 651) and four support legs (745, 747, 749, 751) which engage the floor (38) to provide a lower chamber (85). A cover (621) is supported by upper column members (645, 647, 649, 651) and create an upper chamber (75) adapted to receive cabling (83). The modular tiles (91, 93, 95) have a connecting (845, 847, 849, 851) at each corner. A modular tile system has at least two modular tiles (95) arranged at a common point. A tile connect (99) releasably connects the modular tiles (95) in a platform (39) configuration. In another embodiment, work environment elements are configured on the modular tile platform (39). Each modular tile (95) includes an array of apertures (675) adapted to receive a protruding portion of an indexing element associated with a work environment element. In another embodiment, the modular tile system distributes electrical power. An electrical connector transmits electrical power to a first modular tile circuit defined by a first (702) and a second (708) conductor. A modular tile connect (301, 401, 501) electrically connects the first circuit to a second modular tile.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/22633

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :E04B 5/48

US CL :Please See Extra Sheet.

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)

U.S. : Please See Extra Sheet.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
none

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

APS

searched (tile or panel) within three words of floor in class 174 and received all hits

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,593,499 A (KOBAYASHI et al.) 10 June 1986, (10-06-86). See figure 1.	1, 4-8,10, 14, 20, 24-27, 29, 30
A	US 5,400,554 A (LO) 28 March 1995, (28-03-95). See entire document.	1-86
A	US 5,386,670 A (TAKEDA et al.) 07 February 1995, (07-02-95). See entire document.	1-86
A,E	US 5,697,193 A (FORSLUND, III et al.) 16 December 1997, (16-12-97). See entire document.	1-86
A	US 5,263,289 A (BOYD) 23 November 1993, (23-11-93). See entire document.	1-86

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	*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
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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

52/220.2, 220.3, 220.5, 126.5
174/50

B. FIELDS SEARCHED

Minimum documentation searched

Classification System: U.S.

52/220.1, 220.2, 220.3, 220.5, 126.1, 126.2, 126.3, 126.5, 126.7, 263
174/50

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/22633

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 5,640,821 A (KOCH) 24 June 1997, (24-06-97). See entire document.	1-86