



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
18.01.2012 Bulletin 2012/03

(51) Int Cl.:
E04D 3/28 (2006.01)

(43) Date of publication A2:
18.05.2011 Bulletin 2011/20

(21) Application number: **10167893.6**

(22) Date of filing: **30.06.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
Designated Extension States:
BA ME RS

(30) Priority: **16.11.2009 AU 2009238283**

(71) Applicants:
• **Trower, Stephen John**
Iluka Western Australia 6028 (AU)
• **Bedford, Steven John**
Scarborough Western Australia 6019 (AT)

(72) Inventors:
• **Trower, Stephen John**
Iluka Western Australia 6028 (AU)
• **Bedford, Steven John**
Scarborough Western Australia 6019 (AT)

(74) Representative: **Higgs, Jonathan**
Urquhart-Dykes & Lord LLP
3rd Floor
33 Glasshouse Street
London W1B 5DG (GB)

(54) **A polycarbonate building panel**

(57) A building panel 70 comprises a hollow elongate structure 72 having a generally rectangular cross-sectional profile. The elongate structure 72 comprises first and second outer skins 74 and 75 joined by substantially parallel first and second side walls 76a and 76b. A connecting means 78 of first and second ribs 82 and 84 is provided on each side wall 76 respectively wherein, in use, adjacent panels 70 can be connected to each other side by side to form a segment of a wall or roof. The locking arrangement of second ribs 84 provides additional strength to the overall structure of joined panels. The

elongate structure 72 further comprises two inner skins in the form of webs 80 and 81 extending between the first and second side walls 76 so as to divide the interior of the elongate structure into three chambers. The triple chamber profile of the elongate structure 72 provides the panel 70 with additional structural strength and rigidity, as well as improved thermal and sound insulation properties. The lower chamber 90 may be fitted with a polycarbonate sheet to increase thermal and acoustic performance. The panel 70 is preferably made of polycarbonate.

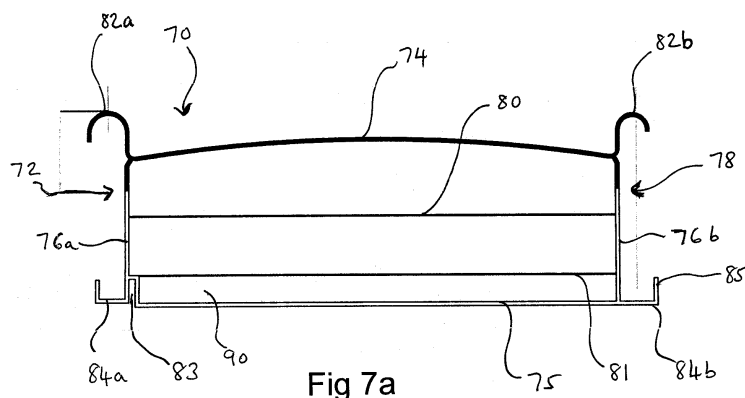


Fig 7a

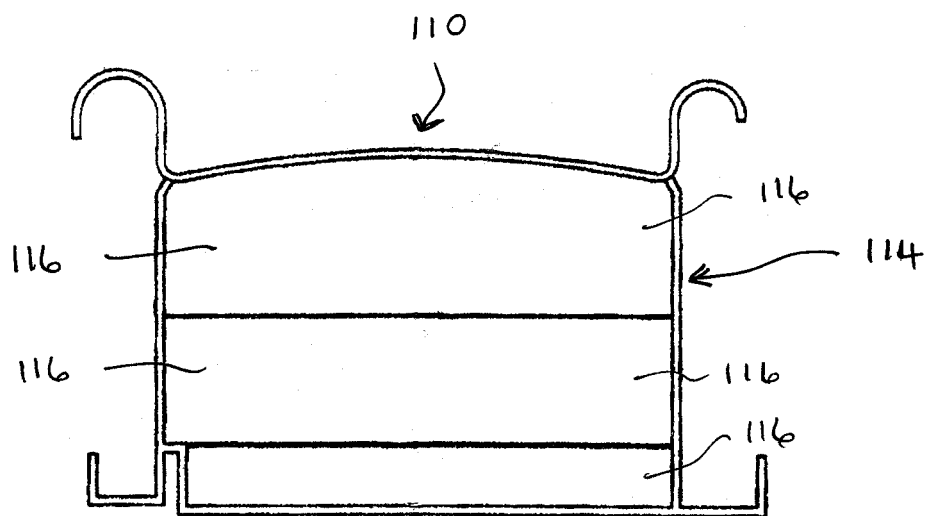


Fig 7b



EUROPEAN SEARCH REPORT

Application Number
EP 10 16 7893

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	FR 2 339 034 A1 (SOKOLER HENRYK [DK]) 19 August 1977 (1977-08-19) * page 4, lines 36-40; figures 1-3 *	1-15	INV. E04D3/28
A	US 4 441 291 A (SOKOLER HENRYK [DK] ET AL) 10 April 1984 (1984-04-10) * column 1, lines 7-15; figures 1-2 *	1-15	
A	EP 0 101 283 A2 (EVERLITE AS [DK]) 22 February 1984 (1984-02-22) * page 1, lines 1-13; figure 1 *	1-15	
A	FR 2 678 302 A1 (PLASTMO FRANCE [FR]) 31 December 1992 (1992-12-31) * page 1, lines 11-12; figure 9 *	1-15	
A	GB 2 243 170 A (ULTRAFRAME LIMITED [GB]) 23 October 1991 (1991-10-23) * figures 1-3 *	1-15	
A	GB 2 147 334 A (VILLADSENS FAB AS JENS) 9 May 1985 (1985-05-09) * figures 1-2 *	1-15	TECHNICAL FIELDS SEARCHED (IPC)
A	GB 1 528 874 A (EVERLITE AS) 18 October 1978 (1978-10-18) * figures 1-4 *	1-15	E04D E04C
A	DE 28 00 811 A1 (OLTMANN HEINRICH FA) 12 July 1979 (1979-07-12) * figures 1-3 *	1-15	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 6 December 2011	Examiner Vratsanou, Violandi
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

 1
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 16 7893

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-12-2011

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2339034	A1	19-08-1977	BE 844506 A1	16-11-1976
			CH 611965 A5	29-06-1979
			DE 2633731 A1	21-07-1977
			DK 21676 A	21-07-1977
			FI 762186 A	21-07-1977
			FR 2339034 A1	19-08-1977
			GB 1511189 A	17-05-1978
			IE 42908 B1	05-11-1980
			IT 1067467 B	16-03-1985
			LU 75455 A1	02-03-1977
			NL 7608591 A	22-07-1977
			NO 762620 A	21-07-1977
			PT 65432 A	01-09-1976
			SE 405878 B	08-01-1979
			SE 7608529 A	21-07-1977
US 4441291	A	10-04-1984	EP 0070930 A1	09-02-1983
			US 4441291 A	10-04-1984
EP 0101283	A2	22-02-1984	CA 1195078 A1	15-10-1985
			DE 3371237 D1	04-06-1987
			DK 362182 A	13-02-1984
			EP 0101283 A2	22-02-1984
			JP 59044450 A	12-03-1984
			US 4509306 A	09-04-1985
FR 2678302	A1	31-12-1992	NONE	
GB 2243170	A	23-10-1991	NONE	
GB 2147334	A	09-05-1985	BE 900690 A1	16-01-1985
			CA 1227010 A1	22-09-1987
			DE 3435776 A1	18-04-1985
			DK 453183 A	31-03-1985
			FI 843800 A	31-03-1985
			GB 2147334 A	09-05-1985
			NL 8402921 A	16-04-1985
			NO 843878 A	01-04-1985
			SE 449889 B	25-05-1987
			SE 8404848 A	31-03-1985
			US 4580373 A	08-04-1986
GB 1528874	A	18-10-1978	AT 342836 B	25-04-1978
			BE 842672 A1	01-10-1976
			CH 610040 A5	30-03-1979
			DE 2530257 A1	13-01-1977

EPO FORM P459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 16 7893

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-12-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		DK 228476 A	08-01-1977
		FI 761963 A	08-01-1977
		FR 2317434 A1	04-02-1977
		GB 1528874 A	18-10-1978
		IE 42836 B1	22-10-1980
		IT 1061841 B	30-04-1983
		JP 1324166 C	27-06-1986
		JP 52028128 A	02-03-1977
		JP 60039819 B	07-09-1985
		LU 75082 A1	21-01-1977
		NL 7607218 A	11-01-1977
		NO 762059 A	10-01-1977
		SE 410021 B	17-09-1979
		SE 7606708 A	08-07-1977

DE 2800811	A1	12-07-1979	NONE
