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(54) Carpet underfelt

(57) A method of treating an underfelt comprising felted thermoplastic fibres which comprises heating at least one surface of the felt sufficiently to soften the fibres, and then passing the felt through polished callender rollers whereby to callender and quench the softened thermoplastic surface of the felt to give a glazed finish. Preferably, the rollers are polished stainless steel rollers, which conveniently may be water cooled to give the best effect. Advantageously, to give optimum heat transfer, the felt is passed around about 90° of the surface of the roller The nip of the rollers is used to give control over the initial pressure and final thickness of the felt, whereas the increased angle of wrap increases the heat

transfer and quenching and thus the glazing effect on the softened thermoplastic fibre surface. The underfelts treated in accordance with the invention are particularly useful in two distinct areas. Firstly, if the surface is lightly glazed, achieved by modest application of heat before callendering, the felt, when in place on the floor, allows a carpet to move more easily when being fitted In a second application, where more heat and pressure is applied, the surface can be callendered further until it is highly glazed and is almost impervious. This enables the finished carpet underlay to be stuck to the floor and for the carpet to be stuck to the underlay.

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	DOCUMENTS CONSIDEREI	D TO BE RELEVANT		
Category	Citation of document with indication of relevant passages	n, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
A	GB 1 074 996 A (LUDLOW 5 July 1967 (1967-07-05 * claims 1,4,9,10 *		1,6,7,13	D06C15/02 D06N7/00
A	US 4 113 827 A (F.L. ST 12 September 1978 (1978 * claims 1,3 *		1,6,7,13	
			Ì	TECHNICAL FIELDS SEARCHED (Int.CI.7)
				D06C D06N
			-	
-	The present search report has been dr	awn un for all claims		
	Place of search	Date of completion of the search		Examiner
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X : parti Y : parti docu A : tech	L ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another iment of the same category nological background	T : theory or principle E : earlier patent docu after the filing date D : document cited in L : document cited for	ment, but publis the application other reasons	ivention ihed on, or
O: non-	-written disclosure mediate document	& : member of the sar document		

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EP 00 20 3152

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.

12-09-2002

DE 1560888 A1 01-10-197 NL 6510757 A 21-02-196 US 3455772 A 15-07-196	DE 1560888 A1 01-10-19 NL 6510757 A 21-02-19 US 3455772 A 15-07-19 US 4113827 A 12-09-1978 AU 508243 B2 13-03-198 AU 509243 B2 01-05-198 AU 2868877 A 15-03-197 BE 858664 A1 13-03-197 CA 1069285 A1 08-01-198 DD 132737 A5 25-10-197 DE 2736741 A1 16-03-197 ES 462336 A1 01-06-197 FR 2364994 A1 14-04-197 GB 1586262 A 18-03-198
AU509243B201-05-198AU2868877A15-03-197BE858664A113-03-197CA1069285A108-01-198DD132737A525-10-197DE2736741A116-03-197ES462336A101-06-197	AU 509243 B2 01-05-194 AU 2868877 A 15-03-197 BE 858664 A1 13-03-197 CA 1069285 A1 08-01-194 DD 132737 A5 25-10-197 DE 2736741 A1 16-03-197 ES 462336 A1 01-06-197 FR 2364994 A1 14-04-197 GB 1586262 A 18-03-194
GB 1586262 A 18-03-198 IT 1085418 B 28-05-198 JP 53038769 A 10-04-197 NL 7710077 A 17-03-197 US 4186470 A 05-02-198	JP 53038769 A 10-04-197 NL 7710077 A 17-03-197