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(54) High-sensitivity thermosensitive multilayer film and method for production of plate-making stencil sheet.

The present invention relates to a high-sensitivity thermosensitive multilayer film and a method to produce plate-making paper using the film. In the present invention, the high-sensitivity thermosensitive multilayer film consists of at least one functional layer and at least one peeling layer. The said functional layer is made of the thermoplastic resin layer with the thickness of 0.1 to 12  $\mu$ m and with at least 30% of a thermal shrinkage rate and at least 50 g/mm² of thermal shrinkage stress value. The peeling layer consists of the thermoplastic resin layer which is different from that of the functional layer and is the special multilayer film which is readily releasable and capable of exerting a compressive force to the functional layer.

When the stencil sheet is manufactured by using the said multilayer film, the operation efficiency at time of lamination and the shrinking capacity can improve by peeling the said peeling layer after lamination from porous supporting member. Moreover the resistance of the original paper to curling is remarkably enhanced under a high temperature circumustances by removing the compressive force working on the functional layer as result of peeling the peeling layer after lamination if the compressive force exists at the said peeling layer.



## EUROPEAN SEARCH REPORT

EP 89 30 7285

DOCUMENTS CONSIDERED TO BE RELEVANT				
Category		h indication, where appropriate, vant passages	Releva to clai	
Y,D	US-A-4 766 033 (ISAO YO * column 23, lines 26 - 39 *	SHIMURA)	1-18	B 41 N 1/24
Y,D	PATENT ABSTRACTS OF (M-724)(3119) 28 July 1988 & JP-A-63 53097 (TORAY II * the whole document *	;	1-18	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
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	The present search report has I	peen drawn up for all claims	<u> </u>	
	Place of search	Date of completion of	search	Examiner
The Hague		22 May 91	3041011	RASSCHAERT A.
CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same catagory A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention		h another	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	