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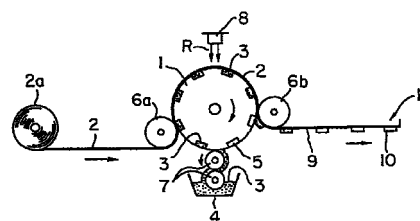
(54) **Method of producing an abrasive tape**

(57) A method is provided of producing an abrasive tape comprising a film substrate (2) and an abrasive layer (10) comprising an ionizing radiation curing type resin (3) constituting a binder and abrasive material particles dispersed therein, the abrasive layer (10) being laminated on one surface of said film substrate (2) and having on the outer surface thereof a plurality of recessed parts (9) said method comprising:

preparing a formplate (1) having a surface provided with a plurality of concavities (5) for forming said recessed parts (9);  
supplying an ionizing radiation curing type resin (3) into at least the concavities (5) of said surface of said formplate (1);  
bringing said film substrate (2) into contact with said ionizing radiation curing type resin (3) thus supplied;  
irradiating said resin (3) with ionizing radiation rays (R) while the film substrate (2) is thus in contact with the ionizing radiation curing type resin (3) which irradiation is carried out by dividing the total dosage of said irradiation into a plurality of steps of dosages thereby to cause shrinkage of the resin (3) as said steps of dosages of irradiation increases, whereby at least one portion of said polishing material particles is caused to migrate sequentially

toward the direction away from the film substrate (2) thereby to cause curing of said resin (3) interposed between the film substrate (2) and the formplate (1), thereby bonding together said resin (3) and the film substrate (2); and

separating from the formplate (1) the film substrate (2) and the abrasive layer (10) of the cured resin (3) adhering closely to said film substrate (2) and provided with an outer figuration complementary to that of the formplate (1), thereby producing said abrasive tape.



**FIG. 1**

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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 10 5025

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B24D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23 November 1999	Examiner De Gussem, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

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

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