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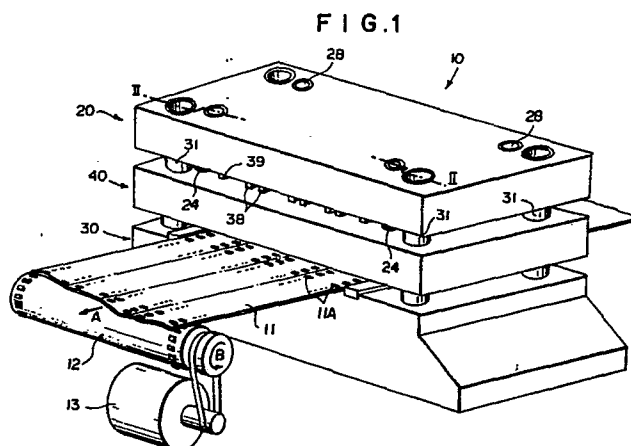
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(54) **Web perforating apparatus.**

(57) A web perforating apparatus for making holes (11A) through a web (11) along its longitudinal direction comprises a die set (10) composed of a die (30) having die cavities (53) and punches (35), which die and punches are connected together so that they are brought to positions close to but spaced apart from each other through guide members (38) extending in the direction normal to the surface of the web. The die set (10) is provided with a stripper (40) between

the die and the punches. The stripper (40) is held so that it is moveable in the direction parallel to the guide members and holds the web (11) when the punches are pulled out of the die cavities. The stripper is provided with punch guide through holes (44), through which the punches are inserted and which each have a size adapted for a very close tolerance fit with each punch.





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.4)
X	GB-A-142204 (SUMMERS HOWELL) * page 1, lines 23 - 32 * * page 2, lines 17 - 24 * * page 3, lines 54 - 57 * * page 4, line 26 - page 5, line 16; figures 1, 13-16 *	1, 2	B26F1/02 B26D7/18
Y	US-A-1782570 (HOWELL) * page 1, lines 4 - 11 * * page 1, lines 46 - 52 * * page 1, line 64 - column 95 * * page 2, lines 38 - 60; figures 1, 2, 4, 5 *	1, 2	
Y	FR-A-2224273 (RAVEL) * figure 4 *	1, 2	
A	US-A-2955066 (WOOD) * column 1, lines 31 - 35 * * column 1, lines 42 - 45 * * column 3, lines 31 - 40; figure 3 *	1, 2	
A	FR-A-404913 (PREVOST) * page 2, lines 61 - 63; figure 4 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	FR-E-11649 (PREVOST) * figure 1 *	1	B26F
A	US-A-1302249 (VOETZER)		
A	DE-C-448337 (I.G. FARBENINDUSTRIE)		
A	DE-C-417958 (ACTIEN-GESELLSCHAFT FUER ANILIN-FABRIKATION IN BERLIN-TREPTOW)		
A	US-A-3545322 (ZYCHAL)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25 JUNE 1990	Examiner HUGGINS J.D.
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			