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(54) Improved pan for railway line double-block sleepers

(57) The rubber Pan (6) has an asymmetry that varies the rigidities on the sides directly in proportion to the stresses applied by the concrete block (4) due to the wheel-rail interaction. The asymmetrical variation can be achieved by decreasing the number of interspaces

(8) between the ridges (7).

The pan subject of the invention is applicable to double-block sleepers without a spacing bar in order to prevent pitching of the concrete block (4) and therefore gage widening of rails.

FIG. 2

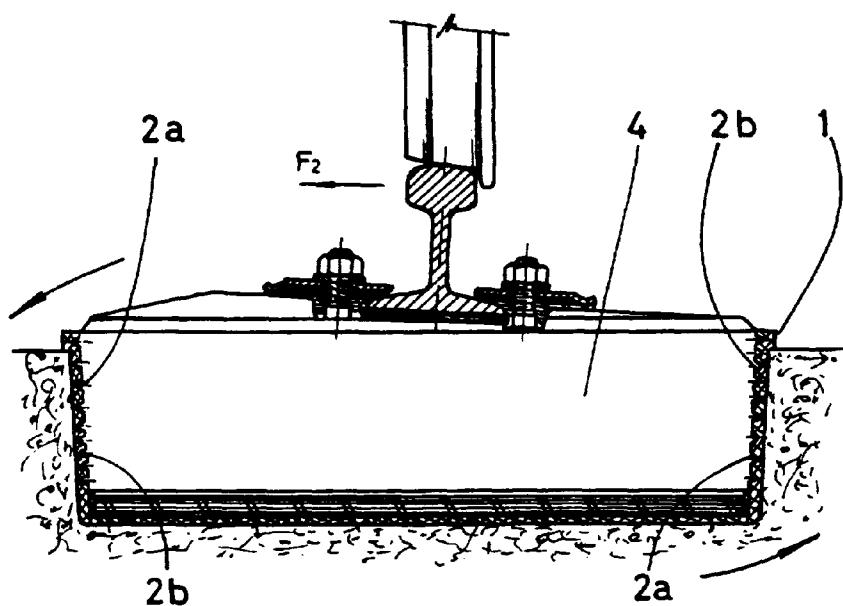
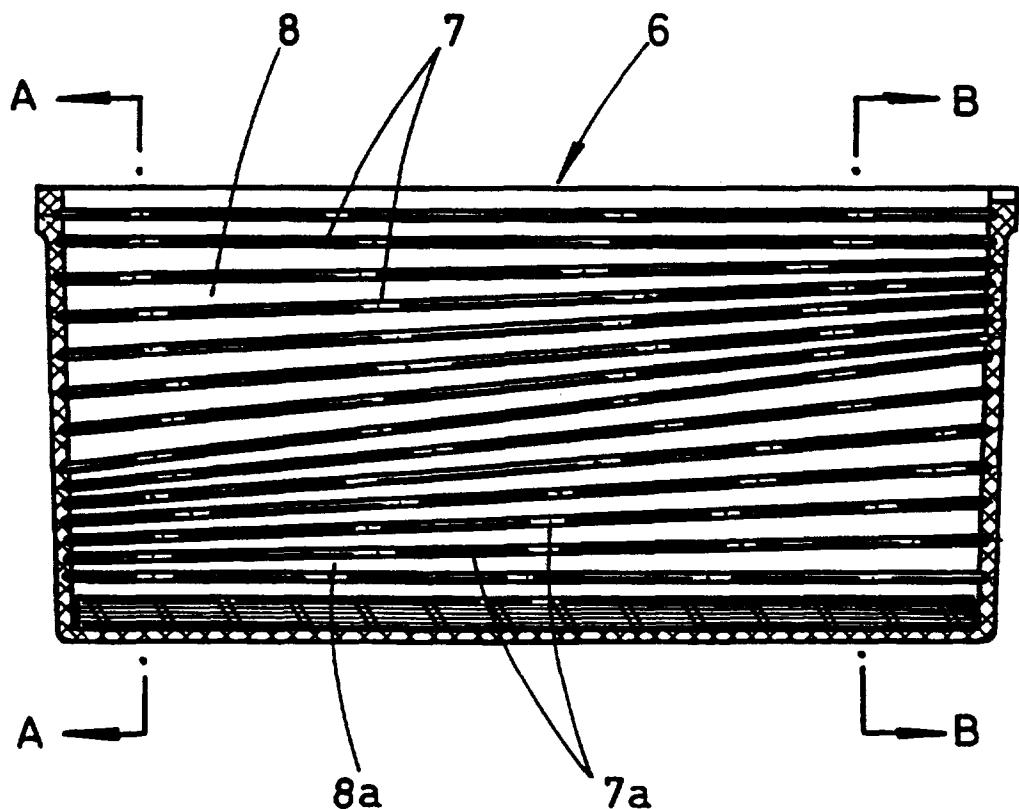


FIG. 3





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EUROPEAN SEARCH REPORT

Application Number
EP 96 50 0063

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)
A	EP 0 603 927 A (COOPSETTE SCRL) 29 June 1994 * the whole document * ---	1,2	E01B1/00
A	EP 0 557 716 A (HILTI AG) 1 September 1993 * abstract; figures * ---	1	
A	FR 2 097 231 A (SOCIÉTÉ D'ÉTUDES FERROVIAIRES) 3 March 1972 * figures * -----	1-3	
TECHNICAL FIELDS SEARCHED (Int.Cl.6)			
E01B			
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	28 January 1997	Blommaert, S	
CATEGORY OF CITED DOCUMENTS		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	
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			