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(54) **Apparatus for producing crate-like containers made of synthetic material**

(57) An apparatus for producing crate-like containers made of synthetic material constituted by a sheet in which die-cutting and folding lines form a bottom (2), two side walls (5,6) and two front walls (3,4) that are extended laterally at opposite ends by means of a first flap (7), a complementary flap (8) and an end flap (9) that can be folded in a tube-like fashion so as to form four corner elements (13), which can be connected on the respective sides (14) to respective end portions (5a,6a) of said side walls (5,6), forming a substantially box-like structure that is open at the top; the apparatus comprises a first station (20) and a second station (21) connected by a sliding surface (22), the first station (20) comprising a plurality of lateral units (23) for folding the complementary flaps (8) and the end flaps (9) and means (44) for the adhesion of the end flaps (9) against the front walls (3,4) in order to form the corner elements (13), the second station (21) comprising a rectangular recess (50)

for the forming of the containers, a pusher (51) that can be actuated from an inactive upper position to a lower position for insertion in the recess (50) for the folding of the front walls (3,4) and side walls (5,6) in order to form the container, means (52) for fixing the sides (14) of the corner elements (13) onto the end portions (5a,6a) of the side walls (5,6), characterized in that the fixing means are constituted by thermal bonding elements (96) that comprise a plurality of thermal bonding laminas (97) that are located at the edges of the recess (50) and are associated with actuation elements (91) that are suitable to guide the thermal bonding laminas (97) from a retracted position to a protruding position, in which they are interposed temporarily between the corner elements (13) and the side walls (5,6), in order to produce the surface melting and mutual adhesion of the end portions (5a,6a) of the side walls and of the sides (14) of the corner elements (13).

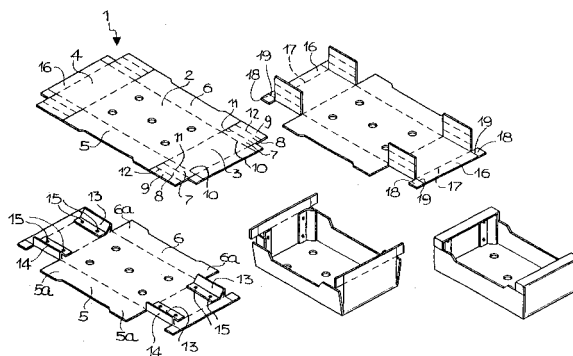


FIG 1

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EUROPEAN SEARCH REPORT

Application Number
EP 02 02 2267

DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	GB 2 137 168 A (CORRUGATED PROD LTD) 3 October 1984 (1984-10-03) * page 1, left-hand column, line 59 - right-hand column, line 87; figures 1-3 *		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B31B B65D
Place of search		Date of completion of the search	Examiner
MUNICH		25 November 2003	Johne, O
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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