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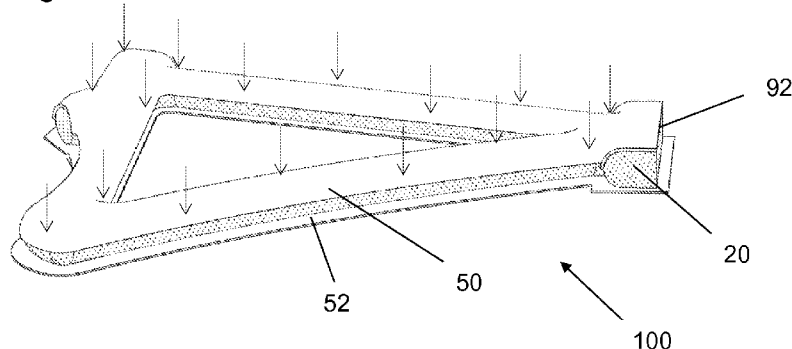
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(54) Title: PANEL DERIVED THERMOPLASTIC COMPOSITE COMPONENTS AND PRODUCTS

Fig. 3C



(57) Abstract: Included herein are constructional techniques for forming thermoplastic composite panels into differently-shaped finished goods. The techniques described are especially useful in forming shaped goods having a complex core. An exemplary composite panel construction produced from a flat panel comprising a core and first and second thermoplastic cover layers bonded to the core, the composite panel construction made by a method of manufacture comprises: cutting core material from an interior surface of at least one of the cover layers while maintaining a bonded section between the core and the cover layers; heat setting a portion of the first cover layer in a shape following at least a portion of the cut surface of the core; and bonding a portion of the second cover layer to a portion of the first cover layer to at least partially close-off the construction.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B29C 70/00 (2012.01)

USPC - 156/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - B29C 65/00, 65/02, 67/00, 70/00, 70/28; B32B 1/00 (2012.01)

USPC - 156/60, 250, 256, 258; 264/230

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2001/0046584 A1 (DANKO) 29 November 2001 (29.11.2001) entire document	1-24
Y	US 2005/0161154 A1 (ANDERSON) 28 July 2005 (28.07.2005) entire document	1-24
Y	JP 53-137274 A2 (SHIRAYANAGI) 30 November 1978 (30.11.1978) entire document	21
Y	US 2010/0186882 A1 (EDELMANN et al) 29 July 2010 (29.07.2010) entire document	23

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