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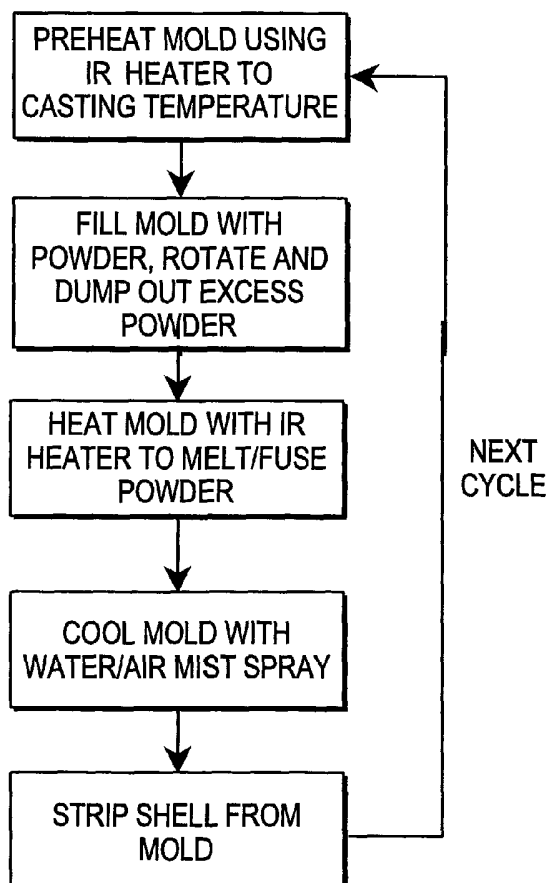
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[Continued on next page]

(54) Title: PLASTIC SKIN FORMING PROCESS



(57) Abstract: An apparatus and method of producing plastic articles comprising preheating a metal mold having a mold contour using infrared heating elements formed to match said mold contour to establish a casting temperature, casting plastic material onto the preheated metal mold surface, fusing the plastic using infrared energy, cooling the metal mold using the change of phase or state of a cooling material and removing the cast plastic article from said metal mold.



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PCT/US04/26724

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B29C 41/18, 39/12, 41/06

US CL : 264/402; 425/174.4

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)

U.S. : 264/402, 410, 462, 481, 492; 425/174.4

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/031139 A1 (GRIMMER/COLLINS & AIKMAN AUTOMOTIVE CO.) 17 April 2003 (17.04.2003), entire document, particularly Claims 1-12.	1-18, 21,22,25-30
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Y		19,20,23,24
Y	US 4,623,503 A (ANESTIS et al) 18 November 1986 (18.11.1986), columns 3, 6, 7, and 8.	1-30
Y	JP 363183819 A (NISSAN SHATAI CO.) 29 July 1988 (29.07.1988), Abstract	1-30
Y	US 6,071,456 A (HANAMOTO et al) 06 June 2000 (06.06.2000), Figs. 16 and 17, columns 15-16.	1-30
Y	US 3,488,411 A (GOLDMAN) 06 January 1970 (06.01.1970), columns 4-6, columns 12-15	3,6, 10-13, 15, 17-20,23,24
Y	US 3,449,546 A (DHOBLE) 10 June 1969 (10.06.1969), column 1; columns 2, lines 1-6; column 4; column 6, lines 18-35.	7,8,9
Y	US RE28497 A (GASMIRE) 29 July 1975 (29.07.1975), column 2, lines 29-33; column 4, line 62 to column 5, line 11.	14,16
Y	US 4,755,333 A (GRAY) 05 July 1988 (05.07.1988), column 2, lines 42-45; column 3, lines 18-39; column 5, lines 5-7.	21-25,30

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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