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(54) Title: MOLDING PROCESSES AND TOOLS THEREFOR

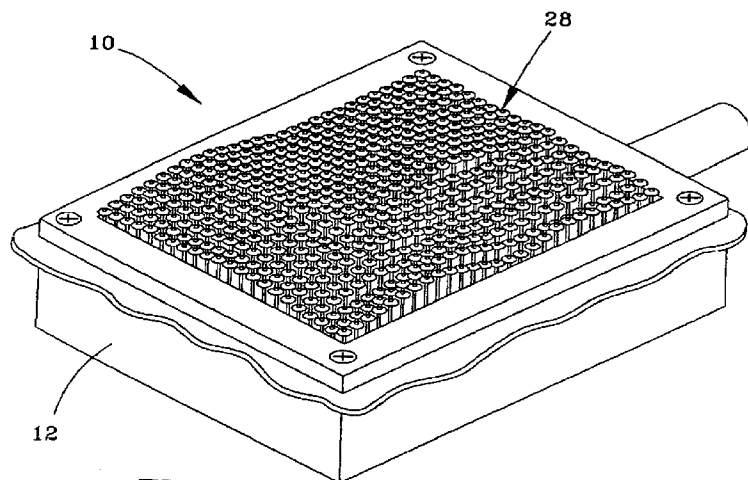


FIG. 1

(57) **Abstract:** A molding process and apparatus suitable for use in molding processes, including rapid prototyping processes and short run production processes. The molding process and apparatus entail the use of a reconfigurable screen tool (10) having a housing (12) defining a manifold cavity (22) and a plurality of substantially parallel pins (16), each having a head (20) protruding from the housing (12) and a shank (18) protruding into the housing (12). The heads (20) of the pins (16) define a screen surface (28) through which air is able to flow, for example, through gaps between adjacent heads (20) or through internal passages (21) within the pins (16). The process further includes axially moving the pins (16) to configure the screen surface (28), preventing further axial movement of the pins (16) relative to each other, and then drawing a vacuum within the manifold cavity (22) and creating a vacuum at the screen surface (28).

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

B. FIELDS SEARCHED

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

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

eKIPASS(KIPO internal) , DELPHION, Espacenet, JPO, USPTO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | US 6484776 B1 (MEILUNAS et al.) 26 NOVEMBER 2002 See the abstract; figures; claims; column 2, line 44 - column 3, line 4. | 1-22 |
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 Further documents are listed in the continuation of Box C. See patent family annex.

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