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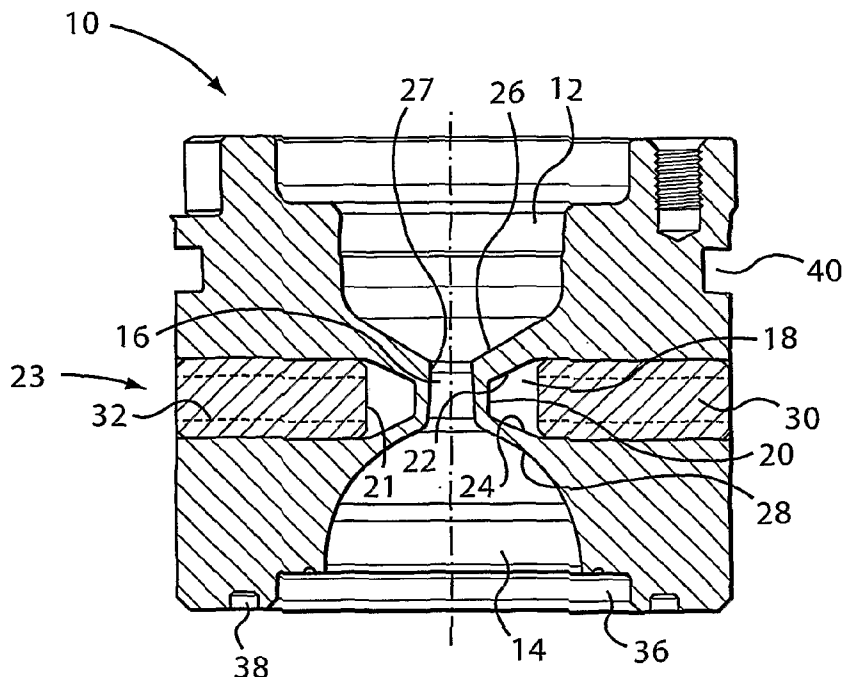
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(54) Title: A GATE COOLING STRUCTURE IN A MOLDING STACK



(57) Abstract: A gate insert (10, 110) for a stack assembly in an injection molding machine having a gate (16, 116) through which a melt of thermoplastics material enters a mold cavity (14, 114). The gate insert has a cooling channel (18, 118) surrounding, and substantially uniformly spaced from, the gate (16, 116). The cooling channel has an inner surface with a profile substantially parallel to the gate. The cooling channel is further defined by either a structural insert in the form of a split ring (30) or by a recess (23) in a two-piece gate insert having interconnecting surfaces (111a, 111b).

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