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(54) Title: APPARATUS FOR AND METHOD OF INJECTION MOLDING

(57) Abstract

An injection molding apparatus and method provides a mold injection nozzle (32) slidably mounted in a bore (28, 30) extending through a first mold half (16) and, optionally, a back plate. The mold nozzle (32) has a tip portion (50) providing a tip surface. In a second mold half (14), there is a corresponding, aligned bore, in which is located a plug (90). The plug (90) can be displaced by a plunger (88) but is separate from the plunger (88). In use, the plug (90) can be used to control the width of a gate between the plug (90) and the tip surface through which resin flows into the cavity. After molding, the plug (90) is displaced from its bore (72) into the bore (30) in the other mold half (16), both to close off the tip portion and to displace the plug (90) and tip portion away from the mold cavity (18). The mold is then opened with the plug (90) and the mold injection nozzle (32) being retained in the first mold half (16).

