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(54) Title: A NEW METHOD FOR INSTALLING INDIRECT AND DIRECT MOLD PRESSURE, TEMPERATURE, AND FLOW FRONT DETECTION SENSORS WITHOUT MACHINING THE MOLD

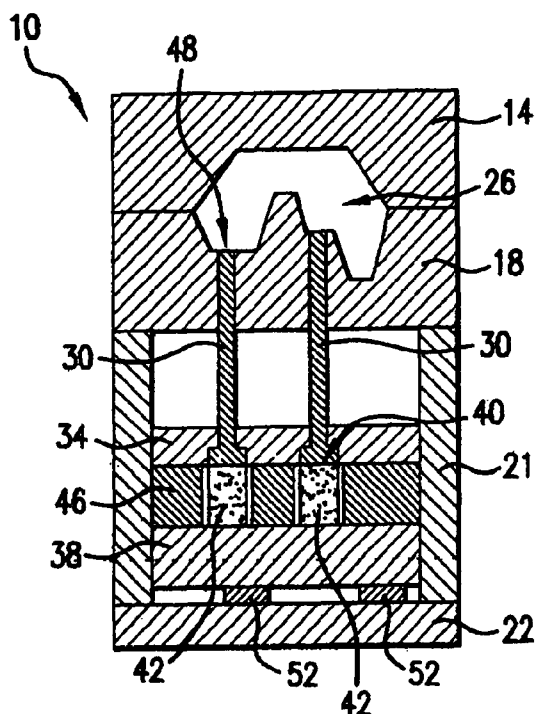


FIG. 1A

(57) Abstract: A molding apparatus includes a mold cavity (26), an ejector pin (30), and a sensor (42). The ejector pin has a first surface (48) exposed to the cavity and a second surface (40) not exposed to the cavity. The sensor (42) is in communicative contact with the ejector pin second surface (40). The sensor (42) is capable of sensing pressure in a mold cavity (26) through the ejector pin (30). The molding apparatus may include a hollow ejector pin (108) with a first end (120) facing the mold cavity (26). A sensor (104) embedded in the hollow ejector pin first end (120) senses a mold cavity parameter. A signal line (112) from the sensor (104) is routed through the hollow ejector pin (108).



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