

SIDE GATED INJECTION MOLDING APPARATUS**WITH RADIALY MOUNTED GATE INSERTS****ABSTRACT OF THE DISCLOSURE**

Injection molding apparatus for side gating to several cavities spaced around a central heated nozzle extending through an opening in the mold. Several side gate seals are seated in a front portion of the nozzle, each in alignment between one of several radial portions of a melt channel through the nozzle and a gate leading to one of the cavities. The side gate seals each have an outer end which extends a sufficient distance outwardly past the inner surface of the opening in the mold to provide room for cooling conduits extending between the cavities and the central opening. The side gate seals are mounted after the nozzle is sealed in the opening in the mold. A gate insert is then mounted radially into position over the outer end of each side gate seal. A gate insert retainer plate secures the gate inserts in place.

Figure 1