

ABSTRACT**APPARATUS, METHOD AND SYSTEM FOR MOLDING
SEMICONDUCTOR COMPONENTS**

A molding apparatus for molding semiconductor components
5 includes a pair of opposing mold chases having mating mold
cavities. The mold cavities are configured to retain polymer
release films for separating the molded components from the
mold cavities. The molding apparatus also includes a movable
10 pot having a reservoir for retaining a preform of molding
compound, and a plunger for moving the molding compound into
the mold cavities. The movable pot is mounted for axial
movement within a chamfered opening in one of the mold
chases. The movable pot is configured to clamp onto the
15 release films to prevent wrinkling of the release films, and
seepage of the molding compound under the release films. A
system for molding semiconductor components includes the
molding apparatus, a pot drive mechanism for moving the
movable pot, a plunger drive mechanism for moving the
20 plunger, and a clamping mechanism for clamping the mold
chases together. A molding method includes the steps of
providing the molding apparatus, placing the release films in
the mold cavities, clamping the release films to one of the
mold chases, and then injecting the molding compound into the
mold cavities.

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Figure : 1A