

ABSTRACT

HIGH TEMPERATURE DIRECTIONALLY SOLIDIFIED AND SINGLE CRYSTAL DIE CASTING

A high-temperature die casting apparatus comprises a die and a chiller. The die has a first die plate and a second die plate with respective first and second recesses defining a main part cavity and gating. The apparatus can be used for die casting metal alloys having a melting temperature of at least about 1500° F (about 815° C).

Fig. 3A