

**A SELF-HEAT REGULATING MOLD ASSEMBLY AND A METHOD OF INJECTING
RUBBER MATERIAL TO THE SAME**

ABSTRACT OF THE DISCLOSURE

5 A self-heat regulating mould assembly configured for maintaining a consistent temperature range at a material inlet thereof comprising (a) a top back plate and a top plate which encloses a piston shaft surrounded by a first air stream channel with gates to push down the piston shaft and a second air stream channel to push up the piston shaft, (b) a runner plate, adapted for a nozzle bushing and a valve pin assembly, being connected to the top plate, (c) a
10 bush plate and an insulation plate to hold a runner bushing, and (d) a cold nozzle plate used to hold the nozzle bushing, wherein the material for moulding is maintained at a temperature of the nozzle bushing before the material is injected into the mould and the air stream passes through the air stream channel at the top plate to push down the piston shaft to squeeze out the moulding material, and the air stream via the second air stream channel to push out the
15 piston shaft and the bushing plate is cooled by way of cooling air such that material for moulding entering the mould assembly is maintained at predetermined temperature range.

(FIG. 1)