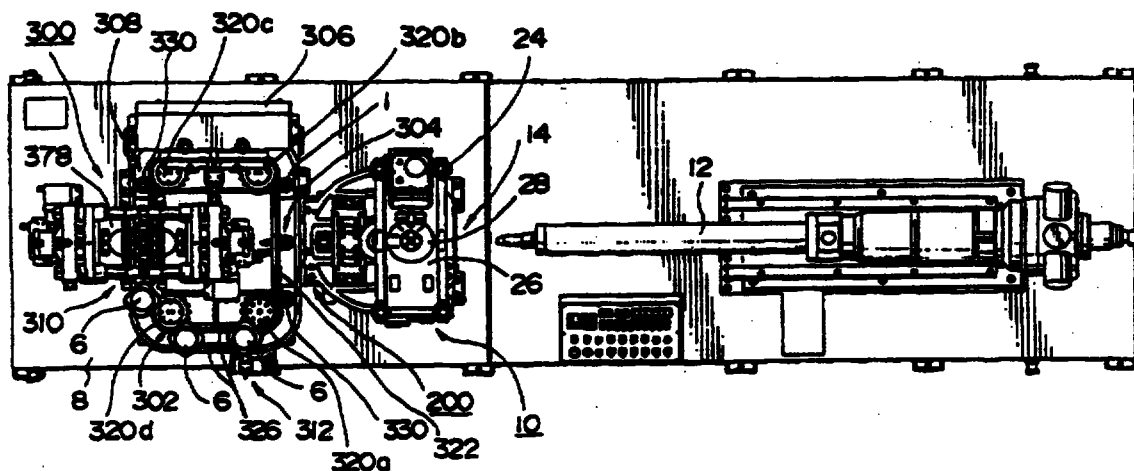




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(54) Title: INJECTION STRETCH BLOW MOLDING APPARATUS AND METHOD



(57) Abstract

An injection stretch blow molding apparatus and method wherein while the preforms (1) are amply cooled the injection molding cycle time is shortened and furthermore a small number of blow cavities are used and the operation rate of these blow cavities is increased. In an injection molding section (14), N ($N \geq 2$) preforms (1) are injection molded and then released from the injection cavity mold (42) at a relatively high mold-release temperature. While the preforms (1) are cooled by the injection section core mold (50), they are carried to a preform ejecting section (16). After the preforms cool to a temperature at which they can be ejected, the preforms (1) are ejected from the injection core mold (50). In a transfer station (200), n ($1 \leq n < N$) of the simultaneously molded N preforms (1) at a time are transferred to a blow molding station (300) in (N/n) transfer operations. In the blow molding station (300), each preform (1) is carried by a carrier member (330) through a heating section (306) and a standby section (308) into a blow molding section (310). In the blow molding section (310), n bottles (6) are simultaneously blow molded from n preforms (1).