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(54) **Title:** IMPROVED DEWATERING MACHINE AND PROCESS

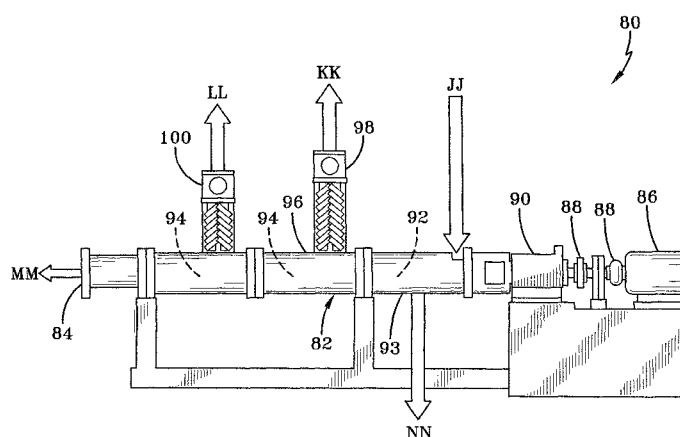


FIG-7

(57) **Abstract:** A dewatering machine for reducing moisture of a polymer or an elastomer includes a generally solid barrel and a pair of screws disposed in the barrel. At least a portion of the screws are intermeshing, and drive means are coupled to the screws. At least one mechanical filter is connected to the barrel. The machine includes means that enable particles of the polymer or the elastomer to fuse, which reduces the amount of fines that escape from the machine. In addition, the machine reduces the moisture of the polymer from up to about 20 percent water by weight to less than about 0.5 percent water by weight, and the moisture of the elastomer from up to about 50 percent water by weight to less than about 3.0 percent water by weight. A method of dewatering for reducing the moisture of a polymer or an elastomer is also provided.

