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(54) Comminuting apparatus.

(5) A pellet feeder (A) feeds pellets of vulcanized rubber or other materials and water or another fluid at controlled rates into a mixing tank (30). An agitator (32) mixes the pellets and fluid into a slurry. The slurry is pumped from the mixing tank to a mill (C) by a pump (34). The mill has a receiving region (70) defined between a stator (48) and a rotor (68) for receiving the slurry. The stator and rotor define a peripheral grinding zone (72) around the slurry receiving region. An impeller (74) has vanes which extend from the upper surface of the rotor to an abrasive surface (82) of the stator such that the impeller vanes are ground at the same rate as the stator and rotor wear to maintain a fluid seal around the impeller blades. Fluid cylinders (50, 52) maintain a constant pressure between the stator and rotor. The stator has a plurality of recesses (86, 86') which preferably have downstream extending relief areas (214). The

rotor also has a plurality of recesses (104, 104') which have

tapered portions along a downstream edge, such as sloping relief areas (220), for wedging the pellets into the grinding zone. The rotor and stator are made of a vitreous bonded stone having a median pore size of about 50 microns.

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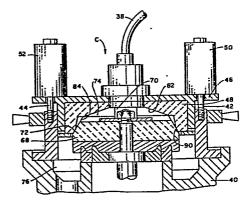


FIG. IA



## **EUROPEAN SEARCH REPORT**

Application number

DOCUMENTS CONSIDERED TO BE RELEVANT					EP 82630099.8
ategory	Citation of document wit of relev	h indication, where appro ant passages	opriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. *)
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Place of search VIENNA		Date of completion of the search 18-06-1985			Examiner URBAN
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