

TITLE OF INVENTION: ROBOTIC GROUTER**ABSTRACT**

An autonomous grouting robotic apparatus comprising a sponge belt, a front sponge guide assembly, a grout extruder with a nozzle, cameras, and a LIDAR is configured to map a room and identify grouting lines each corresponding to a gap between tiles and to drive the robot and control extrusion of the grout from the nozzle and to clean excess grout off tiles. The front sponge guide assembly and grout extruder are mounted to the robotic apparatus using a pivoting mounting arrangement to control a tilt angle to allow extruding into grouting gaps located along the edges of the room.

Figure 1A