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- (54) **Title:** A HEATING UNIT FOR A BEVERAGE PREPARATION MACHINE

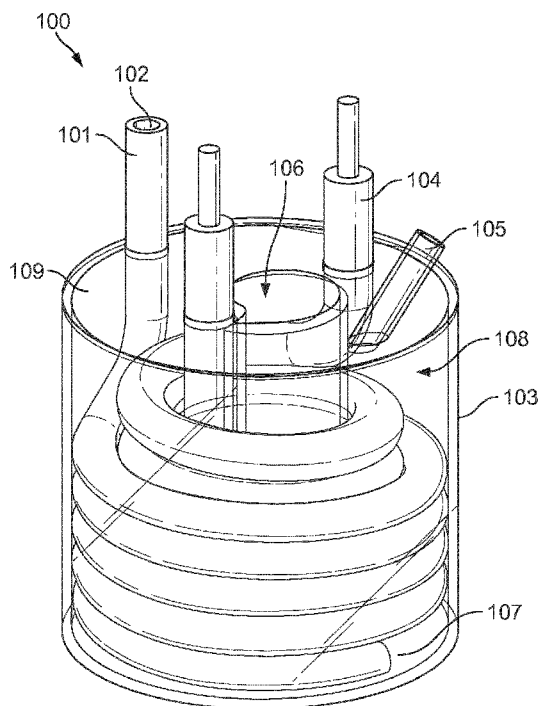


FIG. 3

(57) **Abstract:** The present invention concerns a heating unit (100) for a beverage preparation machine (1) said machine (1) being suitable for preparing a beverage by mixing a beverage ingredient with a fluid, said machine comprising a pump for circulating said beverage preparation fluid through said machine at least from a fluid source to said heating unit, the heating unit (100) being suitable for heating said fluid and comprising: a housing (103) defining a fluid heating chamber (108), and a heating element (104) located inside said housing (103) and being adapted to heat said fluid therein, wherein the heating unit (100) further comprises a pre-heating tube (101) for conveying said fluid received from said pump through said heating unit (100), the pre-heating tube (101) comprising a tube inlet (102) and a tube outlet (107), the tube outlet (107) connecting with the heating chamber (108), and wherein the pre-heating tube (101) is located at least partly within the housing (103) in such a way that the heating element (104) will at least partially heat said fluid in said pre-heating tube (101) before said pre-heated fluid is released into the heating chamber (108) through said outlet (107). In this way, a fluid, e.g. a liquid being water, is effectively heated at two stages using the same heating element during its progression through the heating unit. Furthermore, mixing of hot and cold fluid or liquid within the same mass of liquid or water is avoided as the fluid or liquid will be heated before arriving in the heating chamber.

**Declarations under Rule 4.17:**

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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