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(71) Applicant: **Watts Industries Italia S.r.l.**
39100 Bolzano (IT)

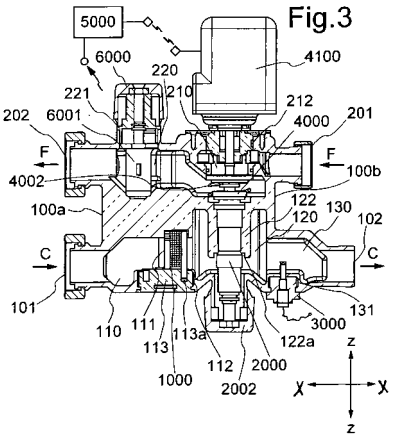
(72) Inventor: **Ferretti, Umberto**
c/o Watts industries Italia S.r.l.
39100 Bolzano (IT)

(74) Representative: **Raimondi, Margherita**
Dott. Ing. Prof. Alfredo Raimondi S.r.l.,
Piazzale Cadorna, 15
20123 Milano (IT)

(54) Single-piece multifunction valve for supplying and controlling a fluid intended for user appliances such as heating devices and the like

(57) Single-piece multifunction valve for supplying and controlling hot water (C) supplied to user appliances (U) comprising a body (100) having formed inside it: a delivery branch (RM) for the hot fluid (C) substantially formed by an inlet aperture (101) and an outlet aperture (102) to the user appliances (U); a return branch (RR) for the cold fluid (F) from the user appliances (U), substantially formed by an inlet aperture (201) for the cold water (F); an outlet aperture (202) for return of the cold fluid to the boiler (CT); said delivery branch (RM) comprising at least a filtering chamber (110) terminating in an annular seat (111) for housing a filter (1000) and communicating with the exterior by means of an aperture (112) able to be closed/opened by means of an associated plug (113); a bypass chamber (120) communicating with the exterior by means of a substantially vertical aperture (121) able to house a bypass valve (2000) provided with an obturator (2001) able to come into contact with the seat (122a) of a first end of a vertical duct (122) suitable for connecting the delivery branch (RM) to the return branch (RR) of the valve; a temperature measuring chamber (130) which communicates with the exterior by means of a substantially vertical aperture (131) formed in the bottom side (100e) of the valve body and able to house a water temperature detection probe (3000) emitting a corresponding electric signal; and said return branch comprising at least a shut-off chamber (210) for the cold water (F) of the return branch (RR) communicating with the exterior by means of a substantially vertical aperture (212) and able to house a shut-off valve (4000) provided with an obturator (4001) which can be opened/closed by means of an associated actuator (4100) controlled by the control unit (5000) ; said shut-off chamber (210) being connected to the delivery branch (RM) by means of said vertical duct (122) of the bypass chamber (120) for recirculation of the fluid; a balancing chamber (220) communicating with the exterior by means of a substantially vertical aperture (221) formed in the upper side (100d) of the valve body and able to house a balancing valve (6000) provided with an obturator (6001) able to determine a greater/smaller flow of the cold return fluid.

Fig.3



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EUROPEAN SEARCH REPORT

Application Number
EP 07 07 5713

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1 The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 May 2009	Delval, Stéphane

CATEGORY OF CITED DOCUMENTS

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