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(54) Title: LAVATORY SYSTEM WITH OVERFLOW PREVENTION AND OTHER FEATURES

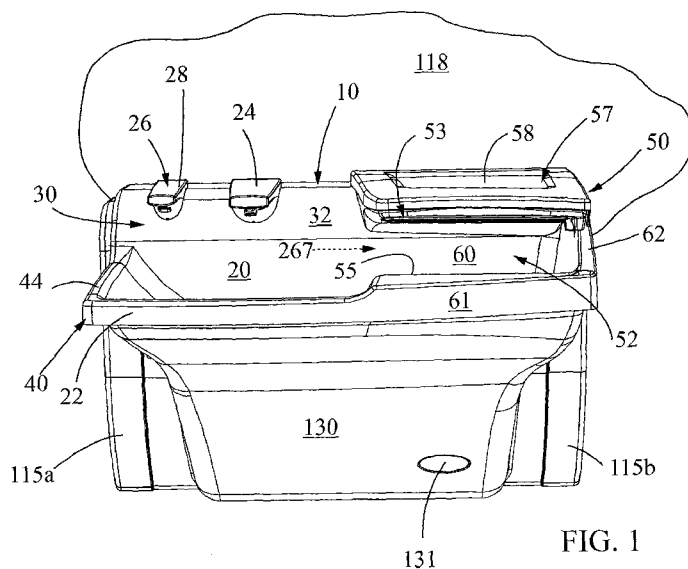


FIG. 1

(57) Abstract: Systems and methods for a lavatory system (10) are described that include a bidirectional hand dryer (50) having a top, bottom, back, and right side and multiple sensors and LEDs. Upper and lower nozzles (160a, 160b) are also provided and respectively connected to upper and lower plenums (142, 144). At least two flexible air delivery hoses are connected to the plenums (142, 144). A motor housing (70) is provided and includes a motor (74), ports connected to the hoses, noise abatement features, and a motor microcontroller (99). A hand-receiving cavity (52) exists between the top, back, right, and bottom side for receiving at least one hand (166) of a user. Tips (162a) are connected to the nozzles (160a, 160b) and emit high speed colliding columns of air to shear water off of the user's hand (166). The columns of air are spaced and calibrated in such a way as to reduce forces on the user's hand which would otherwise move the hand toward the side surfaces.



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USPC - 4/623

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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USPC - 4/623, 638; 34/90, 202, 267, 565; 312/228; 392/360, 380, 381

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2011/044247 A1 (BAYLEY et al) 14 April 2011 (14.04.2011) entire document	12, 21-22 and 24-25
Y		1, 2, 4-11, 14-20 and 23
Y	US 2008/0216343 A1 (CHURCHILL et al) 11 September 2008 (11.09.2008) entire document	1, 2, 4-11, 14-20 and 23
Y	US 5,875,562 A (FOGARTY) 02 March 1999 (02.03.1999) entire document	10

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