

Title (en)
Reverse vending machine

Title (de)
Pfandrückgabegerät

Title (fr)
Appareil de déconsignation

Publication
EP 1235191 B1 20060906 (FR)

Application
EP 02290394 A 20020219

Priority
FR 0102220 A 20010219

Abstract (en)
[origin: EP1235191A1] The equipment includes a vertical guide tube (1) with an inlet (G) for the insertion of cups, and a waste bin in which they are received. The cup passes detection bars (IR1-3) to monitor its passage through the chute, which is used for collection of cups after vending of drinks. The collection equipment comprises a guide tube (1) which is mounted vertically, or nearly vertical with an inlet (G) for the insertion of cups, and a waste bin in which they are received. The tube is of a diameter to ensure that the cup is guided down in the upright position, falling into the waste bin at the bottom. The cup includes an invisible marking, formed with an ink which is not seen under normal white light, but may be detected under IR light. The cup passes a first detection bar (IR1) near to the inlet (G), and then passes a light transmitting source (LL) and a light detector (LD) so that its passage can be read. the cup finally reaches two further detectors (IR2 and IR3) near to the bottom of the chute. A pivoting finger (D) controls the access to the tube just beneath the inlet (G).

IPC 8 full level
G07F 7/06 (2006.01); **G07F 1/04** (2006.01)

CPC (source: EP)
G07F 1/043 (2013.01); **G07F 1/044** (2013.01); **G07F 7/0609** (2013.01)

Cited by
EP1398738A1; CN110574081A; CN107978067A; WO2004025579A1; DE102017108641A1; US11402329B2; EP3616171B1

Designated contracting state (EPC)
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