**CPC COOPERATIVE PATENT CLASSIFICATION**

**E FIXED CONSTRUCTIONS**

**BUILDING**

**E03 WATER SUPPLY; SEWERAGE**

**E03D WATER-CLOSETS OR URINALS WITH FLUSHING DEVICES; FLUSHING VALVES THEREFOR**

**WARNING**

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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**1/00 Water flushing devices with cisterns {; Setting up a range of flushing devices or water-closets; Combinations of several flushing devices}**

1/003 \(. \) [Cisterns in combination with wash-basins, urinals, or the like (domestic plumbing installations E03C)]

1/006 \(. \) [Realisations of and provisions for preventing “sweating” of cisterns]

1/01 \(. \) Shape or selection of material for flushing cisterns

1/012 \(. \) Details of shape of cisterns, e.g. for connecting to wall, for supporting or connecting flushing-device actuators {(mounting frames with incorporated cisterns E03D 11/44)}

1/0125 \(. \) [of built-in cisterns]

1/02 \(. \) High-level flushing systems

1/025 \(. \) [Cisterns with floats actuating the flushing]

1/04 \(. \) Cisterns with bell siphons

1/05 \(. \) [with movable siphon bells]

1/053 \(. \) [which are pushed upwards by means of own buoyancy, springs, counterweights, or the like]

1/056 \(. \) [providing an air lock]

1/06 \(. \) Cisterns with tube siphons

1/07 \(. \) [with movable or deformable siphon tubes]

1/08 \(. \) Siphon action initiated by air or water pressure {(actuating mechanisms therefor E03D 5/024)}

1/082 \(. \) [in tube siphons]

1/085 \(. \) [by injection of air or water in the short leg of the siphon]

1/087 \(. \) [by pump, valve, or the like, in the short leg of the siphon or a vacuum pump in the long leg of the siphon]

1/10 \(. \) [Siphon action initiated by raising the water level in the cistern, e.g. by means of displacement members]

1/105 \(. \) [in cisterns with tube siphons]

1/12 \(. \) [Siphon action initiated by outlet of air]

1/125 \(. \) [in cisterns with tube siphons]

1/14 \(. \) Cisterns discharging variable quantities of water (twin or multiple flushing cisterns E03D 1/22; flushing devices operated by pressure of the water supply system and discharging variable quantities of water E03D 3/12) (also cisterns with bell siphons in combination with flushing valves)

1/141 \(. \) [in cisterns with tube siphons and with tube siphons in combination with flushing valves]
3/00 Flushing devices operated by pressure of the water supply system (flushing valves not connected to the water-supply main, also if air is blown in the water seal for a quick flushing)

3/02 . Self-closing flushing valves (self-closing valves in general F16K 21/04)

3/04 . with piston valve and pressure chamber for retarding the valve-closing movement

3/06 . with diaphragm valve and pressure chamber for retarding the valve-closing movement

3/08 . with other retarding devices

3/10 . Flushing devices with pressure-operated reservoir, e.g. air chamber

3/12 . Flushing devices discharging variable quantities of water (flushing cisterns discharging variable quantities of water E03D 1/14)

5/00 Special constructions of flushing devices (in motor vehicles or trailers B60R 15/00; in railway carriages B61D 35/00; in ships B63B 29/14; in aircraft B64D 11/02), [e.g. closed flushing system]

5/003 . [Grey water flushing systems]

5/006 . [Constructional details of cisterns for using greywater]

5/01 . using flushing pumps

5/012 . combined with movable closure elements in the bowl outlet (bowls with closure elements between bottom or outlet and outlet pipe E03D 11/10)

5/014 . with devices for separate removal of liquids and solids

5/016 . with recirculation of bowl-flushing liquid

5/02 . operated mechanically or hydraulically (E03D 5/01, E03D 5/12 take precedence) (or pneumatically) also details such as push buttons, levers and pull-card therefor)

5/022 . [Operating automatically (E03D 5/10 takes precedence)]

5/024 . [Operated hydraulically or pneumatically]

5/026 . [Devices preventing overflow or locks inhibiting the use of the flushing system (devices preventing overflow of the bowl contents and seals for the bowl outlet E03D 11/00); Devices preventing sucking-up of sealing and flushing water]

5/028 . [Pusher plates and actuating mechanisms for built-in cisterns]

5/04 . directly by the seat or cover (combined with devices for opening and closing shutters in the bowl outlet and/or with devices for raising and lowering seat or cover; Raising or lowering seat and/or cover by flushing or by the flushing mechanism)

5/06 . directly by the door

5/08 . directly by the foot {combined with devices for opening or closing shutters in the bowl outlet and/or with devices for raising or lowering seat and cover and/or for swiveling the bowl}

5/09 . directly by the hand

5/092 . . the flushing element, e.g. siphon bell, being actuated through a lever

5/094 . . the flushing element, e.g. siphon bell, being actuated through a cable, chain or the like

5/10 . operated electrically (E03D 5/01, E03D 5/12 take precedence), e.g. by a photo-cell; also combined with devices for opening or closing shutters in the bowl outlet and/or with devices for raising/or lowering seat and cover and/or for swiveling the bowl

5/105 . . (touchless, e.g. using sensors)

5/12 . discharging periodically (high-level cisterns for periodic discharge E03D 1/16)

7/00 Wheeled lavatories (wheeled closets without flushing A47K 11/00; construction of land vehicles B62)

9/00 Sanitary or other accessories for lavatories (hand tools for cleaning the toilet bowl A47K 11/10; seats or covers for closets A47K 13/00; body supports, other than seats for closets A47K 17/02; devices for preventing contamination of drinking-water pipes E03C 1/10) ; Devices for cleaning or disinfecting the toilet room or the toilet bowl; Devices for eliminating smells (cleaning, disinfecting or deodorising the seat A47K 13/30)

9/002 . {Automatic cleaning devices]

9/005 . {Devices adding disinfecting or deodorising agents to the bowl]

9/007 . {Devices for eliminating smells by diffusing deodorants in lavatories}

9/02 . Devices adding a disinfecting, deodorising, or cleaning agent to the water while flushing (apparatus for disinfection A61L 2/00; treatment of water in general C02F)

9/022 . . consisting of solid substances introduced in the bowl or the supply line

2009/024 . . using a solid substance

2009/026 . . using a gel-form substance

2009/028 . . using a liquid substance

9/03 . consisting of a separate container with an outlet through which the agent is introduced into the flushing water, e.g. by suction [: Devices for agents in direct contact with flushing water]

9/031 . . Devices connected to or dispensing into the flushing pipe

9/032 . . Devices connected to or dispensing into the bowl

9/033 . . Devices placed inside or dispensing into the cistern

9/035 . . Devices connected to the actuation mechanism (E03D 9/036 takes precedence)

9/036 . . {Scoop-like devices]

9/037 . . {Active dispensers, i.e. comprising a moving dosing element (E03D 9/035 takes precedence)

9/038 . . Passive dispensers, i.e. without moving parts}
E03D

9/04 . Special arrangement or operation of ventilating devices (ventilating rooms in general E24F)

9/05 . ventilating the bowl

9/06 . Auxiliary chambers with water connection to the flushing pipe and adapted to receive utensils for bowl-cleaning, e.g. brushes

9/08 . Devices in the bowl producing upwardly-directed sprays; Modifications of the bowl for use with such devices (showers A47K 3/28; bathing devices for special therapeutic or hygienic purposes A61H 33/00, for specific parts of the body A61H 35/00) ; Bidets; Combinations of bowls with urinals or bidets; Hot-air or other devices mounted in or on the bowl, urinal or bidet for cleaning or disinfecting

9/08/5 . [Hand-held spray heads for bidet use or for cleaning the bowl]

9/10 . Waste-disintegrating apparatus combined with the bowl ((special flushing devices E03D 5/00))

9/12 . Means to prevent freezing of lavatories

9/14 . Noise-reducing means combined with flushing valves (noise-absorbing means in pipe systems F16L 55/00 ; if not in combination with flushing valves E03D 11/00: noise-reducing means in valves in general F16K 47/00)

9/16 . Water pressure regulating means in flushing pipes

11/00 Other component parts of water-closets (pipe-joints or couplings in general F16L) ; e.g. noise-reducing means in the flushing system (noise-reducing means in combination with flushing valves E03D 9/14), flushing pipes mounted in the bowl, seals for the bowl outlet, devices preventing overflow of the bowl contents; devices forming a water seal in the bowl after flushing, devices eliminating obstructions in the bowl outlet or preventing backflow of water and excrements from the waterpipe)

11/02 . Water-closet bowls (auxiliary chambers with connections to flushing water for bowl-cleaning utensils E03D 9/06; modified for using upwardly-directed sprays E03D 9/08; seats or covers A47K 13/00) ; Bowls with a double odour seal optionally with provisions for a good siphonic action; siphons as part of the bowl (parts or details of bowls E03D 11/13)

11/02/5 . [Combined with wash-basins, urinals, flushing devices for chamber-pots, bed-pans, or the like]

11/04 . Bowls of flat shape with only slightly inclined bottom (Squat-type closets)

11/06 . Bowls with downwardly-extending flanges [for the sake of flushing]

11/08 . Bowls with means producing a flushing water swirl

11/10 . Bowls with closure elements provided between bottom or outlet and the outlet pipe; Bowls with pivotally supported inserts

11/11 . Bowls combined with a reservoir, e.g. containing apparatus for disinfecting or for disinTEGRATING

11/12 . Swivel-mounted bowls, e.g. for use in restricted spaces (slidably or movably mounted bowls; combinations with flushing and disinfecting devices actuated by the swiveling or sliding movement of the bowl)

11/125 . [Height adjustable bowls]

11/13 . Parts or details of bowls; Special adaptations of pipe joints or couplings for use with bowls ; e.g. provisions in bowl construction preventing backflow of waste-water from the bowl in the flushing pipe or cistern, provisions for a secondary flushing, for noise-reducing

11/135 . [Supports for bowls]

11/14 . Means for connecting the bowl to the wall, e.g. to a wall outlet

11/143 . . . [Mounting frames for toilets and urinals]

11/146 . . . . (with incorporated cistern (wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012)

11/16 . Means for connecting the bowl to the floor, e.g. to a floor outlet

11/17 . Means for connecting the bowl to the flushing pipe

11/18 . Siphons (for pipes in general F16L 43/00, F16L 45/00 ; if as part of the bowl E03D 11/02: connecting the siphon to the bowl)

13/00 Urinals (without flushing devices A47K 11/00) ; Means for connecting the urinal to the flushing pipe and the wastepipe; Splashing shields for urinals

13/002 . [intended for use by women]

13/005 . [Accessories specially adapted for urinals]

13/007 . [Waterless or low-flush urinals]; Accessories therefor (siphons E03C 1/28)

2201/00 Details and methods of use for water closets and urinals not otherwise provided for

2201/20 . Noise reduction features

2201/30 . Water injection in siphon for enhancing flushing

2201/40 . Devices for distribution of flush water inside the bowl