### CPC COOPERATIVE PATENT CLASSIFICATION

#### E FIXED CONSTRUCTIONS

##### BUILDING

#### E03 WATER SUPPLY; SEWERAGE

##### E03D WATER-CLOSETS OR URinals WITH FLUSHING DEvices; FLUSHING VALVES THEREOF

**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.

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1/00</td>
<td>Water flushing devices with cisterns [. Setting up a range of flushing devices or water-closets; Combinations of several flushing devices]</td>
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<tr>
<td>1/003</td>
<td>. [Cisterns in combination with wash-basins, urinals, or the like (domestic plumbing installations E03C)]</td>
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<tr>
<td>1/006</td>
<td>. [Realisations of and provisions for preventing &quot;sweating&quot; of cisterns]</td>
</tr>
<tr>
<td>1/01</td>
<td>. Shape or selection of material for flushing cisterns</td>
</tr>
<tr>
<td>1/012</td>
<td>. Details of shape of cisterns, e.g. for connecting to wall, for supporting or connecting flushing-device actuators ([mounting frames with incorporated cisterns E03D 11/46])</td>
</tr>
<tr>
<td>1/0125</td>
<td>. [. of built-in cisterns]</td>
</tr>
<tr>
<td>1/02</td>
<td>. High-level flushing systems</td>
</tr>
<tr>
<td>1/025</td>
<td>. [. Cisterns with floats acting the flushing]</td>
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<tr>
<td>1/04</td>
<td>. Cisterns with bell siphons</td>
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<tr>
<td>1/05</td>
<td>. [. with movable siphon bells]</td>
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<tr>
<td>1/053</td>
<td>. [. which are pushed upwards by means of own buoyancy, springs, counterweights, or the like]</td>
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<tr>
<td>1/056</td>
<td>. [. providing an air lock]</td>
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<tr>
<td>1/06</td>
<td>. [. Cisterns with tube siphons]</td>
</tr>
<tr>
<td>1/07</td>
<td>. [. with movable or deformable siphon tubes]</td>
</tr>
<tr>
<td>1/08</td>
<td>. [. Siphon action initiated by air or water pressure]</td>
</tr>
<tr>
<td>1/082</td>
<td>. [. (acting mechanisms therefor E03D 5/024)]</td>
</tr>
<tr>
<td>1/085</td>
<td>. [. by injection of air or water in the short leg of the siphon]</td>
</tr>
<tr>
<td>1/087</td>
<td>. [. by pump, valve, or the like, in the short leg of the siphon or a vacuum pump in the long leg of the siphon]</td>
</tr>
<tr>
<td>1/10</td>
<td>. [. Siphon action initiated by raising the water level in the cistern, e.g. by means of displacement members]</td>
</tr>
<tr>
<td>1/105</td>
<td>. [. in cisterns with tube siphons]</td>
</tr>
<tr>
<td>1/12</td>
<td>. [. Siphon action initiated by outlet of air]</td>
</tr>
<tr>
<td>1/125</td>
<td>. [. in cisterns with tube siphons]</td>
</tr>
<tr>
<td>1/14</td>
<td>. [. 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)]</td>
</tr>
<tr>
<td>1/141</td>
<td>. [. in cisterns with tube siphons and with tube siphons in combination with flushing valves]</td>
</tr>
<tr>
<td>1/142</td>
<td>. [. in cisterns with flushing valves]</td>
</tr>
<tr>
<td>1/144</td>
<td>. [. having a single flush outlet and an additional float for delaying the valve closure]</td>
</tr>
<tr>
<td>1/145</td>
<td>. [. having multiple flush outlets]</td>
</tr>
<tr>
<td>2001/147</td>
<td>. [. having provisions for active interruption of flushing]</td>
</tr>
<tr>
<td>2001/148</td>
<td>. [. with means to prevent premature closing of flushing valve]</td>
</tr>
<tr>
<td>1/16</td>
<td>. [. Cisterns for periodical discharge]</td>
</tr>
<tr>
<td>1/165</td>
<td>. [. with bell or tube siphons]</td>
</tr>
<tr>
<td>1/18</td>
<td>. [. Cisterns empty when not in action, e.g. with pressure tanks, with swivel-mounted cisterns]</td>
</tr>
<tr>
<td>1/183</td>
<td>. [. with bell or tube siphons]</td>
</tr>
<tr>
<td>1/186</td>
<td>. [. with flushing valves]</td>
</tr>
<tr>
<td>1/20</td>
<td>. [. Cisterns with tiltable-mounted containers]</td>
</tr>
<tr>
<td>1/22</td>
<td>. [. Twin or multiple flushing cisterns]</td>
</tr>
<tr>
<td>1/24</td>
<td>. [. Low-level flushing systems]</td>
</tr>
<tr>
<td>1/26</td>
<td>. [. Bowl with flushing cistern mounted on the rearwardly extending end of the bowl (shape or material of the cistern E03D 1/01; constructional features of the bowl E03D 11/02 - E03D 11/12)]</td>
</tr>
<tr>
<td>1/263</td>
<td>. [. provided with a bell or tube siphon]</td>
</tr>
<tr>
<td>1/266</td>
<td>. [. exclusively provided with flushing valves as flushing mechanisms]</td>
</tr>
<tr>
<td>1/28</td>
<td>. [. Bowl integral with the flushing cistern]</td>
</tr>
<tr>
<td>1/283</td>
<td>. [. provided with a bell or tube siphon]</td>
</tr>
<tr>
<td>1/286</td>
<td>. [. provided with flushing valves]</td>
</tr>
<tr>
<td>1/30</td>
<td>. [. Valves for high or low level cisterns; Their arrangement (inlet valves, valves in general E16K) (. Flushing mechanisms in the cistern, optionally with provisions for a pre-or a post-flush and for cutting off the flushing mechanism in case of leakage (flushing valves E03D 1/142, E03D 1/186, E03D 1/266, E03D 1/286))]</td>
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<tr>
<td>1/302</td>
<td>. [. with valves kept in open position by means of air or water pressure or by vacuum]</td>
</tr>
<tr>
<td>1/304</td>
<td>. [. with valves with own buoyancy]</td>
</tr>
<tr>
<td>1/306</td>
<td>. [. with articulated valves]</td>
</tr>
<tr>
<td>1/308</td>
<td>. [. with articulated valves E03D 1/306 takes precedence]</td>
</tr>
<tr>
<td>1/32</td>
<td>. [. Arrangement of inlet valves (devices for reducing noise E03D 9/14 (. noise-reducing means E03D 11/00))]</td>
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</tbody>
</table>
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-cleaning fluid

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 periodical 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 F16K 33/00; apparatus for disinfection A61L 2/00; treatment of drinking water A61L 2/00; apparatus for disinfection A61L 2/00; treatment of water in general C02F)

9/002 . . [Automatic cleaning devices]

9/005 . . [Devices adding disinfecting or deodorising agents to the water]

9/007 . . [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)]

9/009 . . [Automatic cleaning devices]

9/005 . . [Devices adding disinfecting or deodorising agents to the water]

9/007 . . [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)]

9/02 . . 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} [using a solid substance]

2009/024 . . {using a gel-form 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}
. Special arrangement or operation of ventilating devices (ventilating rooms in general F24F)
. ventilating the bowl
. using incorporated fans
. Auxiliary chambers with water connection to the flushing pipe and adapted to receive utensils for bowl-cleaning, e.g. brushes
. 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}
. [Hand-held spray heads for bidet use or for cleaning the bowl]
. Waste-disintegrating apparatus combined with the bowl {(special flushing devices E03D 5/00)}
. Means to prevent freezing of lavatories
. 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)
. Water pressure regulating means in flushing pipes

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)
. Water-closet bowls (auxiliary chambers with connections to flushing water for bowl-cleaning utensils E03D 9/06; modified for using upwardly-directed sprays E03D 9/06; 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)
. [Combined with wash-basins, urinals, flushing devices for chamber-pots, bed-pans, or the like]
. Bowls of flat shape with only slightly inclined bottom (Squat-type closets)
. Bowls with downwardly-extending flanges { for the sake of flushing}
. Bowls with means producing a flushing water swirl
. Bowls with closure elements provided between bottom or outlet and the outlet pipe; Bowls with pivotally supported inserts
. Bowls combined with a reservoir, e.g. containing apparatus for disinfecting or for disintegrating
. 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)

(Height adjustable bowls)
. 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}
. [Supports for bowls]
. Means for connecting the bowl to the wall, e.g. to a wall outlet
. [Mounting frames for toilets and urinals]
. {. with incorporated cistern (wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012)
. Means for connecting the bowl to the floor, e.g. to a floor outlet
. Means for connecting the bowl to the flushing pipe
. 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})

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

[Hand-held spray heads for bidet use or for cleaning the bowl]
. Means for connecting the bowl to the flushing pipe
. 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})

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

Water-injection toilets or devices for flushing or cleaning the bowl

Ventilated and ventilating devices for water closets or wash-basins

Ventilated and ventilating devices for water closets or wash-basins

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)

Water-closet bowls (auxiliary chambers with connections to flushing water for bowl-cleaning utensils E03D 9/06; modified for using upwardly-directed sprays E03D 9/06; 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)

(Height adjustable bowls)
. 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}
. [Supports for bowls]
. Means for connecting the bowl to the wall, e.g. to a wall outlet
. [Mounting frames for toilets and urinals]
. {. with incorporated cistern (wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012)
. Means for connecting the bowl to the floor, e.g. to a floor outlet
. Means for connecting the bowl to the flushing pipe
. 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})

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

[Hand-held spray heads for bidet use or for cleaning the bowl]
. Means for connecting the bowl to the flushing pipe
. 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})

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

Water-injection toilets or devices for flushing or cleaning the bowl

Ventilated and ventilating devices for water closets or wash-basins

Ventilated and ventilating devices for water closets or wash-basins

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)

Water-closet bowls (auxiliary chambers with connections to flushing water for bowl-cleaning utensils E03D 9/06; modified for using upwardly-directed sprays E03D 9/06; 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)

(Height adjustable bowls)
. 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}
. [Supports for bowls]
. Means for connecting the bowl to the wall, e.g. to a wall outlet
. [Mounting frames for toilets and urinals]
. {. with incorporated cistern (wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012)
. Means for connecting the bowl to the floor, e.g. to a floor outlet
. Means for connecting the bowl to the flushing pipe
. 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})

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

[Hand-held spray heads for bidet use or for cleaning the bowl]
. Means for connecting the bowl to the flushing pipe
. 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})

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

Water-injection toilets or devices for flushing or cleaning the bowl

Ventilated and ventilating devices for water closets or wash-basins

Ventilated and ventilating devices for water closets or wash-basins

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)

Water-closet bowls (auxiliary chambers with connections to flushing water for bowl-cleaning utensils E03D 9/06; modified for using upwardly-directed sprays E03D 9/06; 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)

(Height adjustable bowls)
. 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}
. [Supports for bowls]
. Means for connecting the bowl to the wall, e.g. to a wall outlet
. [Mounting frames for toilets and urinals]
. {. with incorporated cistern (wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012)
. Means for connecting the bowl to the floor, e.g. to a floor outlet
. Means for connecting the bowl to the flushing pipe
. 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})