

CPC**COOPERATIVE PATENT CLASSIFICATION****E03B**

INSTALLATIONS OR METHODS FOR OBTAINING, COLLECTING, OR DISTRIBUTING WATER ([drilling wells, obtaining fluids in general from wells E21B](#); [pipe-line systems in general F17D](#))

E03B 1/00

Methods or layout of installations for water supply ([E03B 3/00](#), [E03B 9/00](#) take precedence)

[E03B 1/02](#)

. for public or like main supply { [for industrial use](#) }

[E03B 1/04](#)

. for domestic or like local supply

[E03B 1/041](#)

.. { [Greywater supply systems](#) }

[E03B 1/042](#)

... { [Details thereof, e.g. valves or pumps](#) }

[E03B 1/044](#)

.... { [Switch valves in waste pipes](#) }

[E03B 2001/045](#)

... using household water

[E03B 2001/047](#)

... using rainwater

[E03B 1/048](#)

.. { [Systems for collecting not used fresh water](#) }

E03B 3/00

Methods or installations for obtaining or collecting drinking water or tap water ([treatment of water C02F](#))

[E03B 3/02](#)

. from rain-water

[E03B 3/03](#)

.. Special vessels for collecting or storing rain-water for use in the household, e.g. water-butts { [containers for storage, in general, B65D](#) }

[E03B 3/04](#)

. from surface water { [Barrages E02B 7/00](#) }

[E03B 3/06](#)

. from underground { [consolidating foundation soil by draining, e.g. by lowering the water level E02D 3/00](#); [subsoil filtering E21B 43/02](#) }

[E03B 3/08](#)

.. Obtaining and confining water by means of wells ([applicable to a combination of water and other liquids or to other liquids only E21B 43/00](#))

[E03B 3/10](#)

... by means of pit wells

[E03B 3/11](#)

.... in combination with tubes, e.g. perforated, extending horizontally, or upwardly inclined, exterior to the pits

[E03B 3/12](#)

... by means of vertical pipe wells

[E03B 3/14](#)

... by means of horizontal or oblique wells

[E03B 3/15](#)

... Keeping wells in good condition, e.g. by cleaning, repairing, regenerating; Maintaining or enlarging the capacity of wells or water-bearing layers ([with artificial enrichment E03B 3/32](#)) { [cleaning, in general B08B](#) }

[E03B 3/16](#)

... Component parts of wells

[E03B 3/18](#)

.... Well filters ([filters in general B01D 24/00 to B01D 35/00](#))

[E03B 3/20](#)

..... of elements of special shape

[E03B 3/22](#)

..... Selection of specified materials { [not used, documents in E03B 3/20](#) }

[E03B 3/24](#)

..... formed of loose materials, e.g. gravel

- E03B 3/26 with packed filtering material
- E03B 3/28 . from humid air ([condensing of vapours in general B01D 5/00](#); [dehumidification of air for air-conditioning F24F 3/14](#))
- E03B 3/30 . from snow or ice
- E03B 3/32 . with artificial enrichment, e.g. by adding water from a pond or a river { [consolidating foundation soil by draining e.g. by lowering the water level E02D 3/00](#) }
- E03B 3/34 . . of underground water
- E03B 3/36 . . of surface water
- E03B 3/38 . Curbs for springs
- E03B 3/40 . Other devices for confining, e.g. trenches, drainage
- E03B 5/00** **Use of pumping plants or installations; Layouts thereof** ([pumps](#); [pumping plants or installations per se F04](#))
- E03B 5/02 . arranged in buildings
- E03B 5/025 . . { [with surface tanks](#) }
- E03B 5/04 . arranged in wells
- E03B 5/045 . . { [with surface tanks](#) }
- E03B 5/06 . . Special equipment, { [e.g. well seals and connections for well casings or the like](#) }
- E03B 7/00** **Water main or service pipe systems** ([pipes or tubes in general F16L](#))
- E03B 7/003 . { [Arrangement for testing of watertightness of water supply conduits](#) }
- E03B 7/006 . { [Arrangements or methods for cleaning or refurbishing water conduits](#) }
- E03B 7/02 . Public or like main pipe systems
- E03B 7/04 . Domestic or like local pipe systems ([domestic plumbing E03C 1/02](#))
- E03B 7/045 . . { [diverting initially cold water in warm water supply](#) }
- E03B 7/07 . Arrangement of devices, e.g. filters, flow controls, measuring devices, siphons, valves, in the pipe systems ([devices per se, see the relevant classes for these devices](#))
- E03B 7/071 . . { [Arrangement of safety devices in domestic pipe systems, e.g. devices for automatic shut-off](#) }
- E03B 7/072 . . { [Arrangement of flowmeters](#) }
- E03B 7/074 . . { [Arrangement of water treatment devices](#) }
- E03B 7/075 . . { [Arrangement of devices for control of pressure or flow rate](#) }
- E03B 7/077 . . { [Arrangement of backflow preventing devices](#) }
- E03B 7/078 . . { [Combined units with different devices; Arrangement of different devices with respect to each other](#) }
- E03B 7/08 . . Arrangement of draining devices, { [e.g. manual shut-off valves](#) } ([draining devices](#))

in general [F16K](#), [F16L](#))

- E03B 7/09 . Component parts or accessories (tools for cleaning pipes [B08B 9/02](#); devices for preventing contamination of drinking water pipes for domestic use [E03C 1/10](#); devices for preventing damage in case of bursts of pipes [F16L](#); heating of pipes in general [F16L 53/00](#))
- E03B 7/095 .. { Component holders or housings, e.g. boundary boxes }
- E03B 7/10 .. Devices preventing bursting of pipes by freezing (devices preventing bursting of pipes in general [F16L 55/00](#))
- E03B 7/12 ... by preventing freezing
- E03B 7/14 .. Devices for thawing frozen pipes

E03B 9/00 **Methods or installations for drawing-off water** (domestic water-drawing devices [E03C](#); taps or valves per se [F16K](#))

- E03B 9/02 . Hydrants; Arrangements of valves therein; Keys for hydrants
- E03B 2009/022 .. Hydrants with a tubular valve seat
- E03B 9/025 .. { Taps specially designed for outdoor use, e.g. wall hydrants, sill cocks }
- E03B 9/027 ... { with features preventing frost damage }
- E03B 9/04 .. Column hydrants
- E03B 9/06 ... Covers
- E03B 9/08 .. Underground hydrants
- E03B 9/10 ... Protective plates or covers
- E03B 9/12 ... Stand-pipes
- E03B 9/14 .. Draining devices for hydrants
- E03B 9/16 .. Devices for retaining foreign matter, e.g. sand
- E03B 9/18 .. Cleaning tools for hydrants
- E03B 9/20 .. Pillar fountains or like apparatus for dispensing drinking water

E03B 11/00 **Arrangements or adaptations of tanks for water supply** (water-butts [E03B 3/03](#); storage aspects [B65D](#), [B65G](#), [F17B](#), [F17C](#); foundations [E02D 27/38](#); construction or assembling of bulk storage containers employing civil engineering techniques [E04H 7/00](#); tower aspects [E04H 12/00](#))

- E03B 2011/005 . Tanks with two or more separate compartments divided by e.g. a flexible membrane
- E03B 11/02 . for domestic or like local water supply
- E03B 11/04 .. without air regulators { i.e. without air inlet or outlet valves; water tanks provided with flexible walls }
- E03B 11/06 .. with air regulators { air receivers for water conduits [F16L 55/04](#); pressure control devices for fluids [G05D](#) }
- E03B 11/08 ... Air regulators
- E03B 11/10 . for public or like main water supply
- E03B 11/12 .. of high-level tanks
- E03B 11/14 .. of underground tanks
- E03B 11/16 .. Adaptations of devices for putting pumping plants in and out of operation, e.g.

automatic control devices { not used, documents in [F04](#) }