

**CPC****COOPERATIVE PATENT CLASSIFICATION****E03F****SEWERS; CESSPOOLS****E03F 1/00****Methods, systems, or installations for draining-off sewage or storm water**

## E03F 1/001

- . into a body of water

## E03F 1/002

- . { with disposal into the ground, e.g. via dry wells }

## E03F 1/003

- .. via underground elongated vaulted elements

## E03F 1/005

- .. via box-shaped elements

## E03F 1/006

- . {Pneumatic sewage disposal systems; accessories specially adapted therefore }

## E03F 1/007

- .. { for public or main systems }

## E03F 1/008

- . { Temporary fluid connections for emptying mobile sewage holding tanks, e.g. of trailers, boats }

**E03F 3/00****Sewer pipe-line systems**

## E03F 3/02

- . Arrangement of sewer pipe-lines or pipe-line systems

## E03F 3/04

- . Pipes or fittings specially adapted to sewers ([manufacture of concrete tubes B28](#) ; [pipes or pipe fittings in general F16L](#) )

## E03F 3/043

- .. { Partitioned to allow more than one medium to flow through }

## E03F 3/046

- .. {Open sewage channels }

## E03F 3/06

- . Methods of, or installations for, laying sewer pipes ([making pipes in situ F16L 1/038](#)) { [laying conduits in association with the digging of a trench E02F 5/10](#); [laying pipes in general F16L 1/00](#) }

**E03F 5/00****Sewerage structures**

## E03F 5/02

- . Manhole shafts or other inspection chambers ([in general E02D 29/12](#)) ; snow-filling openings; accessories ([covers or frames for manholes or the like E02D 29/14](#))

## E03F 5/021

- .. { Connection of sewer pipes to manhole shaft }

## E03F 5/022

- .. { Partitioned to allow more than one medium to flow through }

## E03F 5/024

- .. { made of plastic material }

## E03F 5/025

- .. { provided with a liner }

## E03F 5/027

- .. { The bottom made of prefabricated segments }

## E03F 5/04

- . Gullies {inlets, road sinks, floor drains } with or without odour seals or sediment traps

## E03F 5/0401

- .. { Gullies for use in roads or pavements }

## E03F 5/0402

- ... { provided with flushing means for cleaning or emptying }

## E03F 5/0403

- ... { with a sediment trap }

- E03F 5/0404 . . . { with a permanent or temporary filtering device; Filtering devices specially adapted therefor }
- E03F 5/0405 . . . { with an odour seal }
- E03F 5/0406 . . . . { the odour seal being easily accessible for cleaning }
- E03F 5/0407 . . { Floor drains for indoor use }
- E03F 5/0408 . . . { specially adapted for showers }
- E03F 5/0409 . . . { Devices for preventing seepage around the floor drain }
- E03F 5/041 . . { Accessories therefor }
- E03F 5/0411 . . . { Devices for temporarily blocking inflow into a gully }
- E03F 5/042 . . Arrangements of means against overflow of water, backing-up from the drain
- E03F 5/046 . . adapted to be used with kerbs ([E03F 5/06](#) takes precedence) {draining of roads [E01F](#) }
- E03F 5/06 . . Gully gratings
- E03F 5/08 . Ventilation of sewers
- E03F 5/10 . Collecting-tanks; Equalising-tanks for regulating the run-off; Laying-up basins { ([sewage settling installations 85C3E, 85C6A; sand traps 85C6A2; emptying sewage settling installations 85C6E; settling installations in general B01D 21/00](#)) }
- E03F 5/101 . . { Dedicated additional structures, interposed or parallel to the sewer system }
- E03F 5/102 . . { using already existing parts of the sewer system for runoff-regulation }
- E03F 5/103 . . { Naturals or landscape retention bodies, e.g. ponds }
- E03F 5/105 . . { Accessories, e.g. flow regulators or cleaning devices }
- E03F 5/106 . . . { Passive flow control devices, i.e. not moving during flow regulation }
- E03F 5/107 . . . { Active flow control devices, i.e. moving during flow regulation }
- E03F 5/108 . . . { Cleaning devices providing a flushing surge }
- E03F 5/12 . Emergency outlets
- E03F 5/125 . . { providing screening of overflowing water }
- E03F 5/14 . Devices for separating liquid or solid substances from sewage, e.g. sand or sludge traps, rakes or grates ([for use in sewage purification plants or both in sewage purification plants or in sewer systems B01D , C02F](#) ) { gullies with sediment traps [E03F 5/04](#) }
- E03F 5/16 . . Devices for separating oil, water or grease from sewage in drains leading to the main sewer
- E03F 5/18 . Tanks for disinfecting, neutralising, or cooling sewage ([arrangements in tanks as to the biological or chemical aspect C02F](#) )
- E03F 5/20 . Siphon pipes or inverted siphons ([for connections of baths, basins, or the like E03C 1/12](#)) { siphons in dams [E02B 7/18](#) }
- E03F 5/22 . Adaptations of pumping plants for lifting sewage ([wheeled apparatus for emptying sewers or cesspools E03F 7/10; pumps, pumping plants, per se F04](#) )
- E03F 5/24 . Installations for neutralising explosions in sewers {[in tanks B65D 90/38; security devices against the effect of explosions for manhole covers E02D 29/14](#) }
- E03F 5/26 . Installations for stirring-up sewage {[disintegrating garbage to be evacuated with](#)

sewage [B02C 18/40](#); devices on water-closet bowls [E03D](#) }

**E03F 7/00**      **Other installations or implements for operating sewer systems, e.g. for preventing or indicating stoppage; Emptying cesspools**

- E03F 7/02      .    Shut-off devices (in general [F16K](#) )
- E03F 7/04      . .    Valves for preventing return flow {in gullies, drains or the like [E03F 5/042](#) }
- E03F 7/06      .    Devices for restraining rats or other animals
- E03F 7/08      .    Hand implements for emptying sewers or cesspools
- E03F 7/10      .    Wheeled apparatus for emptying sewers or cesspools
- E03F 7/103     . .    { with a tank featuring one or more partition walls }
- E03F 7/106     . .    { Accessories, e.g. hose support }
- E03F 7/12      .    Installations enabling inspection personnel to drive along sewer canals

**E03F 9/00**      **Arrangements or fixed installations {methods or devices }for cleaning {or clearing }sewer pipes, e.g. by flushing (sediment traps, rakes, screens, or the like, arranged in sewer lines**[E03F 5/14](#)**; cleaning pipes in general, devices for cleaning pipes**[B08B 9/02](#)**; {gullies provided with flushing means for cleaning or emptying[E03F 5/04B](#)**; devices to remove obstructions in waste-pipes or sinks[E03C 1/30](#) )}****

- E03F 9/002     .    {Cleaning sewer pipes by mechanical means (combined with flushing [E03F 9/00](#)) }
- E03F 9/005     . .    {Apparatus for simultaneously pushing and rotating a cleaning device carried by the leading end of a cable or an assembly of rods }
- E03F 9/007     .    { Devices providing a flushing surge }

**E03F 11/00**      **Cesspools (emptying cesspools [E03F 7/00](#); features relating to treatment of sewage [C02F](#) )**

**E03F 2003/00**      **Sewer pipe-line systems**

- E03F 2003/06   .    Methods of, or installations for, laying sewer pipes (making pipes in situ [F16L 1/038](#)) { laying conduits in association with the digging of a trench [E02F 5/10](#); laying pipes in general [F16L 1/00](#) }
- E03F 2003/065 . .    Refurbishing of sewer pipes, e.g. by coating, lining

**E03F 2005/00**      **Sewerage structures**

- E03F 2005/02   .    Manhole shafts or other inspection chambers (in general [E02D 29/12](#)) ; snow-filling openings; accessories (covers or frames for manholes or the like [E02D 29/14](#))
- E03F 2005/028 . .    Sealing joints between manhole segments
- E03F 2005/04   .    Gullies {inlets, road sinks, floor drains } with or without odour seals or sediment traps

E03F 2005/0412	..	with means for adjusting their position with respect to the surrounding surface
E03F 2005/0413	...	for height adjustment
E03F 2005/0414	...	for inclination adjustment
E03F 2005/0415	...	for horizontal position adjustment
E03F 2005/0416	..	with an odour seal
E03F 2005/0417	...	in the form of a valve
E03F 2005/0418	...	in the form of a bell siphon
E03F 2005/06	..	Gully gratings
E03F 2005/061	...	hinged to the body of the gully
E03F 2005/063	...	with slidable or rotatable locking elements
E03F 2005/065	...	with elastic locking elements
E03F 2005/066	...	with means for protecting against vandalism
E03F 2005/068	...	with means for enhancing water flow

**E03F 2201/00      Details, devices or methods not otherwise provided for**

E03F 2201/10	.	Dividing the first rain flush out of the stormwater flow
E03F 2201/20	.	Measuring flow in sewer systems
E03F 2201/30	.	Devices providing a sequential discharge in sewer systems
E03F 2201/40	.	Means for indicating blockage in sewer systems