

**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