Ventilation of mines or tunnels

1/00 Ventilation of mines or tunnels; Distribution of ventilating currents (ventilating rooms or spaces in general E24F)

1/003 . (Ventilation of traffic tunnels (during construction E21F 1/04 - E21F 3/00))

1/006 . (Ventilation at the working face of galleries or tunnels)

1/02 . Test models (analogue computers therefor G06G 7/50)

1/04 . Air ducts (suspension devices E21F 17/02)

1/06 . . Duct connections (tube connections in general F16L)

1/08 . Ventilation arrangements in connection with air ducts, e.g. arrangements for mounting ventilators ([E21F 1/003 takes precedence]); ventilators in general F04D)

1/085 . . [using compressed gas injectors]

1/10 . Air doors ([E21F 1/003 takes precedence]; air locks E21F 1/145; dam doors E21F 17/12); doors in general E06B)

1/12 . . Devices for automatically opening air doors

1/14 . Air partitions; Air locks ([E21F 1/003 takes precedence]; dams E21F 17/103; air locks for foundations F02D)

1/145 . . [Air locks (air doors E21F 1/10; dam doors E21F 17/12)]

1/16 . Shaft covers

1/18 . Gravity flow ventilation (E21F 1/02 - E21F 1/16 take precedence)

3/00 Cooling or drying of air (air-conditioning rooms or spaces in general F24F)

Safety devices (flue-gas indicators G01N); Rescue devices

5/00 Means or methods for preventing, binding, depositing, or removing dust (in combination with mining machines E21C 35/22); Preventing explosions or fires (dams E21F 17/103; applying liquids or other fluent materials to surfaces in general B05)

5/02 . by wetting or spraying

5/04 . . Spraying barriers (spray nipples, spraying in general B05B, B05D; picks with arrangements of fluid-spraying nozzles E21C 35/187)

5/06 . . Fluids used for spraying

5/08 . Rock dusting of mines; Depositing other protective substances

5/10 . . Devices for rock dusting

5/12 . . Composition of rock dust

5/14 . Fluid barriers or rock dusters made to work by, or at the same time as, shots or explosions

5/143 . . [Fluid barriers]

5/146 . . [Rock dusters]

5/16 . Layers of hygroscopic or other salts deposited on floors, walls, or the like, for binding dust; Deposition of such layers (dust-absorbing materials in general C09K 3/22)

5/18 . Impregnating walls, or the like, with liquids for binding dust ([injections for improving soil or rock E21D 9/001; borehole closures, i.e. packers, for use during the injection process E21B 33/12])

5/20 . Drawing-off or depositing dust (dust-removing while drilling E21C 7/00; while slitting E21C 35/22)

7/00 Methods or devices for drawing-off gases with or without subsequent use of the gas for any purpose

9/00 Devices preventing sparking of machines or apparatus (preventing sparking of electric machines or apparatus H01K, H02K)

11/00 Rescue devices or other safety devices, e.g. safety chambers or escape ways (breathing aids for curative purposes A61H 31/00; respiratory apparatus A62B 7/00; breathing apparatus for accidentally buried persons A62B 33/00)

13/00 Transport specially adapted to underground conditions (mine cars B61D; transport in general, loading (unless specially adapted to underground conditions) B65G)

13/002 . [Crushing devices specifically for conveying in mines]

13/004 . [Staff transport system]

13/006 . [Equipment transport systems]

13/008 . . [for mine roof support units for step-by-step movement]

13/02 . [Transport of mined mineral] in galleries

13/025 . . [Shuttle cars]
Safety devices; Rescue devices

13/04  . [Transport of mined material] in gravity inclines; in staple or inclined shafts
13/042 . . [Vertical hydraulic conveying of coal (conveying by water flow in general B65G 53/00)]
13/045 . . [Bunkers specially adapted for mining purposes (chutes in general B65G 11/00)]
13/047 . . [comprising helically running channels (chutes of helical form in general B65G 11/06)]
13/06  . [Transport of mined material] at or adjacent to the working face
13/061 . . [Chutes and braking conveyors for average and steep slopes, adapted for mining purposes (chutes in general B65G 11/00)]
13/063 . . [Loading devices for use in mining]
13/065 . . . [Scrapers (digging devices guided by cables E02F 3/54; combined with planing means E21C 27/42)]
13/066 . . . [Scraper chain conveyors (in general B65G 19/00)]
13/068 . . . . [Special adaptations for use at the junction of the working face with the gallery, e.g. driving stations coupled to the driving station of the winning machine]
13/08  . . Shifting conveyors or other transport devices from one location at the working face to another (guiding mining machines along conveyors for the cut mineral E21C 35/12; in combination with mine roof supports for step-by-step movement E21D 23/00)
13/083 . . . [Conveyor belts removing methods or devices]
13/086 . . . [Armoured conveyors shifting devices]
13/10  . . Anchorings for conveyors

15/00  Methods or devices for placing filling-up materials in underground workings (dams E21F 17/103 ; chocks made of flexible containers filled with backfilling material E21D 15/483)
15/005 . . [characterised by the kind or composition of the backfilling material]
15/02  . . Supporting means, e.g. shuttering, for filling-up materials
15/04  . . . Stowing mats; Goaf wire netting; Partition walls
15/06  . . Filling-up mechanically
15/08  . . Filling-up hydraulically or pneumatically (hydraulic or pneumatic transport devices B65G; pipes, pipe couplings F16L)
15/10  . . . Hydraulic or pneumatic filling-up machines

16/00  Drainage (keeping dry foundation sites or other areas in the ground E02D 19/00)
16/02  . . of tunnels

17/00  Methods or devices for use in mines or tunnels, not covered elsewhere (mine lighting F21, H05B)
17/02  . . Suspension devices for tubes or the like, e.g. for ventilating ducts (supporting pipes, cables or protective tubing in general F16L 3/00 - F16L 7/00)
17/04  . . Distributing means for power supply in mines
17/06  . . . Distributing electric power; Cable networks; Conduits for cables (circuit arrangements for supplying or distributing electric power in general H02J)
17/08  . . . Distributing hydraulic power; Pipe networks for hydraulic liquid (pipe-line systems in general F17D)

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