

CPC COOPERATIVE PATENT CLASSIFICATION

C10K PURIFYING OR MODIFYING THE CHEMICAL COMPOSITION OF COMBUSTIBLE GASES CONTAINING CARBON MONOXIDE

- 1/00 Purifying combustible gases containing carbon monoxide** (isolation of hydrogen from mixtures containing hydrogen and carbon monoxide [C01B 3/50](#))
- 1/001 . {working-up the condensates (recovering of NH₃ and NH₄ salts [C01C 1/00](#); working-up or purifying tars and tar-oils [C10C 1/00](#))}
 - 1/002 . {Removal of contaminants}
 - 1/003 . . {of acid contaminants, e.g. acid gas removal}
 - 1/004 . . . {Sulfur containing contaminants, e.g. hydrogen sulfide}
 - 1/005 . . . {Carbon dioxide}
 - 1/006 . . . {Hydrogen cyanide}
 - 1/007 . . {of metal compounds}
 - 1/008 . . . {Alkali metal compounds}
 - 1/02 . Dust removal
 - 1/022 . . {by baffle plates}
 - 1/024 . . {by filtration}
 - 1/026 . . {by centrifugal forces (cyclones [B04C](#))}
 - 1/028 . . {by electrostatic precipitation (separating dispersed particles from gases or vapour by electrostatic effect in general [B03C 3/00](#))}
 - 1/04 . by cooling to condense non-gaseous materials ([C10K 1/001](#) takes precedence)}
 - 1/043 . . {adding solvents as vapour to prevent naphthalene- or resin deposits}
 - 1/046 . . {Reducing the tar content}
 - 1/06 . . combined with spraying with water ([C10K 1/001](#) takes precedence)}
 - 1/08 . by washing with liquids; Reviving the used wash liquors (gas washers [B01D](#))
 - 1/085 . . {two direct washing treatments, one with an aqueous liquid and one with a non-aqueous liquid}
 - 1/10 . . with aqueous liquids {(alkaline reacting aqueous liquids [C10K 1/12](#))}
 - 1/101 . . . {with water only}
 - 1/102 . . . {containing free acid}
 - 1/103 . . . {alkali- or earth-alkali- or NH₄ salts or inorganic acids derived from sulfur}
 - 1/105 . . . {containing metal compounds other than alkali- or earth-alkali carbonates, -hydroxides, oxides, or salts of inorganic acids derived from sulfur}
 - 1/106 {containing Fe compounds}
 - 1/107 {containing As-, Sb-, Sn compounds}
 - 1/108 {containing Cu compounds}
 - 1/12 . . . alkaline-reacting {including the revival of the used wash liquors}
 - 1/121 {containing NH₃ only (possibly in combination with NH₄ salts)}
 - 1/122 {containing only carbonates, bicarbonates, hydroxides or oxides of alkali-metals (including Mg)}
 - 1/123 {containing alkali-, earth-alkali- or NH₄ salts of inorganic acids derived from sulfur}
 - 1/124 {containing metal compounds other than alkali- or earth-alkali carbonates, hydroxides- or oxides- or salts of inorganic acids derived from sulfur}
 - 1/125 {containing Fe compounds}
 - 1/126 {containing As-, Sb-, Sn compounds}
 - 1/127 {containing Cu compounds}
 - 1/128 {containing organic oxygen transferring compounds, e.g. sulfoxides}
 - 1/14 organic
 - 1/143 {containing amino groups}
 - 1/146 {alkali-, earth-alkali- or NH₄ salts}
 - 1/16 . . with non-aqueous liquids
 - 1/165 . . . {at temperatures below zero degrees Celsius}
 - 1/18 . . . hydrocarbon oils ([C10K 1/165](#) takes precedence)}
 - 1/20 . by treating with solids; Regenerating spent purifying masses {(separation by adsorption [B01D 53/02](#); separation by chemical reaction [B01D 53/34](#); refining of hydrocarbon oils with acids [C10G 17/02](#), [C10G 27/02](#), [C10G 29/12](#))}
 - 1/205 . . {Methods and apparatus for treating the purifying masses without their regeneration (recovering of sulfur [C01B 17/00](#); recovering of cyanide compounds [C01C 3/00](#))}
 - 1/22 . . Apparatus, e.g. dry box purifiers
 - 1/24 . . . Supporting means for the purifying material
 - 1/26 . . Regeneration of the purifying material {contains also apparatus for the regeneration of the purifying material}
 - 1/28 . . Controlling the gas flow through the purifiers
 - 1/30 . . with moving purifying masses
 - 1/32 . with selectively adsorptive solids, e.g. active carbon
 - 1/34 . by catalytic conversion of impurities to more readily removable materials
 - 3/00 Modifying the chemical composition of combustible gases containing carbon monoxide to produce an improved fuel, e.g. one of different calorific value, which may be free from carbon monoxide**
 - 3/001 . {by thermal treatment}
 - 3/003 . . {Reducing the tar content}
 - 3/005 . . . {by partial oxidation}
 - 3/006 . . . {by steam reforming}
 - 3/008 . . . {by cracking}
 - 3/02 . by catalytic treatment
 - 3/023 . . {Reducing the tar content}
 - 3/026 . . {Increasing the carbon monoxide content, e.g. reverse water-gas shift [RWGS]}
 - 3/04 . . reducing the carbon monoxide content {, e.g. water-gas shift [WGS]}
 - 3/06 . by mixing with gases