

## ECLA EUROPEAN CLASSIFICATION

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

**C10K1/00** Purifying combustible gases containing carbon monoxide (isolation of hydrogen from mixtures containing hydrogen and carbon monoxide [C01B3/50](#))

- C10K1/00B . [N: working-up the condensates (recovering of NH<sub>3</sub> and NH<sub>4</sub> salts [C01C1/00](#); working-up or purifying tars and tar-oils [C10C1/00](#))]
- C10K1/00D . [N: Removal of contaminants] [N1204]
- C10K1/00D2 . . [N: of acid contaminants, e.g. acid gas removal] [N1204]
- C10K1/00D2B . . . [N: Sulfur containing contaminants, e.g. hydrogen sulfide] [N1204]
- C10K1/00D2D . . . [N: Carbon dioxide] [N1204]
- C10K1/00D2F . . . [N: Hydrogen cyanide] [N1204]
- C10K1/00D4 . . [N: of metal compounds] [N1204]
- C10K1/00D4B . . . [N: Alkali metal compounds] [N1204]
- C10K1/02 . Dust removal [[C9807](#)]
- C10K1/02B . . [N: by baffle plates]
- C10K1/02D . . [N: by filtration]
- C10K1/02F . . [N: by centrifugal forces (cyclones [B04C](#))]
- C10K1/02H . . [N: by electrostatic precipitation (separating dispersed particles from gases or vapour by electrostatic effect in general [B03C3/00](#))] [N1204]
- C10K1/04 . by cooling to condense non-gaseous materials [N: ([C10K1/00B](#) takes precedence)]
- C10K1/04B . . [N: adding solvents as vapour to prevent naphthalene- or resin deposits]
- C10K1/04D . . [N: Reducing the tar content] [N1204]
- C10K1/06 . . combined with spraying with water [N: ([C10K1/00B](#) takes precedence)]
- C10K1/08 . by washing with liquids; Reviving the used wash liquors (gas washers [B01D](#))
- C10K1/08B . . [N: two direct washing treatments, one with an aqueous liquid and one with a non-aqueous liquid]
- C10K1/10 . . with aqueous liquids [N: alkaline reacting aqueous liquids [C10K1/12](#)]
- C10K1/10B . . . [N: with water only]
- C10K1/10D . . . [N: containing free acid]
- C10K1/10F . . . [N: alkali- or earth-alkali- or NH<sub>4</sub> salts or inorganic acids derived from sulfur]
- C10K1/10G . . . [N: containing metal compounds other than alkali- or earth-alkali carbonates, -hydroxides, oxides, or salts of inorganic acids derived from sulfur]
- C10K1/10G2 . . . . [N: containing Fe compounds]
- C10K1/10G4 . . . . [N: containing As-, Sb-, Sn compounds]
- C10K1/10G6 . . . . [N: containing Cu compounds]
- C10K1/12 . . . alkaline-reacting [N: including the revival of the used wash liquors]

- C10K1/12B . . . . [N: containing NH<sub>3</sub> only (possibly in combination with NH<sub>4</sub> salts)]
- C10K1/12D . . . . [N: containing only carbonates, bicarbonates, hydroxides or oxides of alkali-metals (including Mg)]
- C10K1/12F . . . . [N: containing alkali-, earth-alkali- or NH<sub>4</sub> salts of inorganic acids derived from sulfur]
- C10K1/12G . . . . [N: containing metal compounds other than alkali- or earth-alkali carbonates, hydroxides- or oxides- or salts of inorganic acids derived from sulfur]
- C10K1/12G2 . . . . . [N: containing Fe compounds]
- C10K1/12G4 . . . . . [N: containing As-, Sb-, Sn compounds]
- C10K1/12G6 . . . . . [N: containing Cu compounds]
- C10K1/12H . . . . . [N: containing organic oxygen transferring compounds, e.g. sulfoxides]
- C10K1/14 . . . . . organic
- C10K1/14D . . . . . [N: containing amino groups]
- C10K1/14D2 . . . . . [N: alkali-, earth-alkali- or NH<sub>4</sub> salts]
- C10K1/16 . . . with non-aqueous liquids
- C10K1/16B . . . [N: at temperatures below zero degrees Celsius]
- C10K1/18 . . . hydrocarbon oils [N: ([C10K1/16B](#) takes precedence)]
  
- C10K1/20 . . . by treating with solids; Regenerating spent purifying masses [N: (separation by adsorption [B01D53/02](#); separation by chemical reaction [B01D53/34](#) ; refining of hydrocarbon oils with acids [C10G17/02](#), [C10G27/02](#), [C10G29/12](#))]
- C10K1/20B . . . [N: Methods and apparatus for treating the purifying masses without their regeneration (recovering of sulfur [C01B17/00](#); recovering of cyanide compounds [C01C3/00](#))]
- C10K1/22 . . . Apparatus, e.g. dry box purifiers
- C10K1/24 . . . . Supporting means for the purifying material
- C10K1/26 . . . . Regeneration of the purifying material [N: contains also apparatus for the regeneration of the purifying material]
- C10K1/28 . . . . Controlling the gas flow through the purifiers
- C10K1/30 . . . . with moving purifying masses
  
- C10K1/32 . . . with selectively adsorptive solids, e.g. active carbon
  
- C10K1/34 . . . by catalytic conversion of impurities to more readily removable materials
  
- C10K3/00** **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**
  
- C10K3/00B . . . [N: by thermal treatment] [N1204]
- C10K3/00B2 . . . [N: Reducing the tar content] [N1204]
- C10K3/00B2B . . . . [N: by partial oxidation] [N1204]
- C10K3/00B2D . . . . [N: by steam reforming] [N1204]
- C10K3/00B2F . . . . [N: by cracking] [N1204]
  
- C10K3/02 . . . by catalytic treatment
- C10K3/02B . . . [N: Reducing the tar content] [N1204]

- C10K3/02D
  - . . [N: Increasing the carbon monoxide content, e.g. reverse water-gas shift [RWGS]] [N1204]
- C10K3/04
  - . . reducing the carbon monoxide content [N: e.g. water-gas shift [WGS]] [C1204]
- C10K3/06
  - . by mixing with gases