

CPC**COOPERATIVE PATENT CLASSIFICATION****C10K****PURIFYING OR MODIFYING THE CHEMICAL COMPOSITION OF COMBUSTIBLE GASES CONTAINING CARBON MONOXIDE****C10K 1/00**

Purifying combustible gases containing carbon monoxide (isolation of hydrogen from mixtures containing hydrogen and carbon monoxide [C01B 3/50](#))

C10K 1/001

- . { working-up the condensates (recovering of NH_3 and NH_4 salts [C01C 1/00](#); working-up or purifying tars and tar-oils [C10C 1/00](#)) }

C10K 1/002

- . { Removal of contaminants }

C10K 1/003

- .. { of acid contaminants, e.g. acid gas removal }

C10K 1/004

- ... { Sulfur containing contaminants, e.g. hydrogen sulfide }

C10K 1/005

- ... { Carbon dioxide }

C10K 1/006

- ... { Hydrogen cyanide }

C10K 1/007

- .. { of metal compounds }

C10K 1/008

- ... { Alkali metal compounds }

C10K 1/02

- . Dust removal

C10K 1/022

- .. {by baffle plates }

C10K 1/024

- .. {by filtration }

C10K 1/026

- .. { by centrifugal forces (cyclones [B04C](#)) }

C10K 1/028

- .. { by electrostatic precipitation (separating dispersed particles from gases or vapour by electrostatic effect in general [B03C 3/00](#)) }

C10K 1/04

- . by cooling to condense non-gaseous materials {([C10K 1/001](#) takes precedence)}

C10K 1/043

- .. {adding solvents as vapour to prevent naphthalene- or resin deposits }

C10K 1/046

- .. { Reducing the tar content }

C10K 1/06

- .. combined with spraying with water {([C10K 1/001](#) takes precedence)}

C10K 1/08

- . by washing with liquids; Reviving the used wash liquors (gas washers [B01D](#))

C10K 1/085

- .. {two direct washing treatments, one with an aqueous liquid and one with a non-aqueous liquid }

C10K 1/10

- .. with aqueous liquids {alkaline reacting aqueous liquids [C10K 1/12](#)}

C10K 1/101

- ... {with water only }

C10K 1/102

- ... {containing free acid }

C10K 1/103

- ... {alkali- or earth-alkali- or NH_4 salts or inorganic acids derived from sulfur }

C10K 1/105

- ... {containing metal compounds other than alkali- or earth-alkali carbonates, -hydroxides, oxides, or salts of inorganic acids derived from sulfur }

C10K 1/106

- {containing Fe compounds }

C10K 1/107

- {containing As-, Sb-, Sn compounds }

C10K 1/108

- {containing Cu compounds }

C10K 1/12

- ... alkaline-reacting {including the revival of the used wash liquors }

C10K 1/121

- {containing NH_3 only (possibly in combination with NH_4 salts) }

C10K 1/122

- {containing only carbonates, bicarbonates, hydroxides or oxides of alkali-metals (including Mg) }

C10K 1/123	{containing alkali-, earth-alkali- or NH ₄ salts of inorganic acids derived from sulfur}
C10K 1/124	{containing metal compounds other than alkali- or earth-alkali carbonates, hydroxides- or oxides- or salts of inorganic acids derived from sulfur}
C10K 1/125	{containing Fe compounds}
C10K 1/126	{containing As-, Sb-, Sn compounds}
C10K 1/127	{containing Cu compounds}
C10K 1/128	{containing organic oxygen transferring compounds, e.g. sulfoxides}
C10K 1/14	organic
C10K 1/143	{containing amino groups}
C10K 1/146	{alkali-, earth-alkali- or NH ₄ salts}
C10K 1/16	..	with non-aqueous liquids
C10K 1/165	...	{at temperatures below zero degrees Celsius}
C10K 1/18	...	hydrocarbon oils {(C10K 1/165 takes precedence)}
C10K 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)}
C10K 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)}
C10K 1/22	..	Apparatus, e.g. dry box purifiers
C10K 1/24	...	Supporting means for the purifying material
C10K 1/26	..	Regeneration of the purifying material {contains also apparatus for the regeneration of the purifying material}
C10K 1/28	..	Controlling the gas flow through the purifiers
C10K 1/30	..	with moving purifying masses
C10K 1/32	.	with selectively adsorptive solids, e.g. active carbon
C10K 1/34	.	by catalytic conversion of impurities to more readily removable materials
C10K 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
C10K 3/001	.	{ by thermal treatment}
C10K 3/003	..	{ Reducing the tar content}
C10K 3/005	...	{ by partial oxidation}
C10K 3/006	...	{ by steam reforming}
C10K 3/008	...	{ by cracking}
C10K 3/02	.	by catalytic treatment
C10K 3/023	..	{ Reducing the tar content}
C10K 3/026	..	{ Increasing the carbon monoxide content, e.g. reverse water-gas shift [RWGS]}
C10K 3/04	..	reducing the carbon monoxide content { e.g. water-gas shift [WGS]}
C10K 3/06	.	by mixing with gases