Title (en)

GOLD CATALYST FOR FUEL CELLS

Title (de)

GOLD KATALYSATOR FÜR BRENNSTOFFZELLEN

Title (fr)

CATALYSEUR A L'OR POUR PILES A COMBUSTIBLE

Publication

EP 1027152 A1 20000816 (EN)

Application

EP 98943591 A 19980929

Priority

- BG 9800016 W 19980929
- BG 10193197 A 19970929

Abstract (en)

[origin: WO9916546A1] Gold catalyst for reforming and electrochemical oxidation of hydrocarbon fuels, methanol and methane, for application in the fuel cell industry. The gold catalyst is suitable for removal of impurities from the anodic fuel, by selective oxidation of the carbon monoxide. The active component of the catalyst is a complex which consists of gold and reducible oxide from the transition metals group. The concentration of the gold is from 0.1 % to 2.5 % and the concentration of the transition metal is from 0.1 % to 5 %. The support of the catalyst consists of oxides of ceria, zirconia and titanium. The working temperature of the catalyst is from ambient to 650 DEG C.

IPC 1-7

B01J 23/52; B01J 23/63; H01M 8/12; H01M 4/92; H01M 4/90; H01M 8/06

IPC 8 full level

C01B 3/32 (2006.01); **B01J 23/52** (2006.01); **B01J 23/63** (2006.01); **C01B 3/38** (2006.01); **C01B 3/40** (2006.01); **C10K 3/04** (2006.01); **C10L 1/02** (2006.01); **H01M 4/90** (2006.01); **H01M 4/92** (2006.01); **H01M 8/0612** (2016.01); **H01M 8/0662** (2016.01); H01M 4/86 (2006.01); H01M 8/1009 (2016.01)

CPC (source: EP)

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Citation (search report)

See references of WO 9916546A1

Designated contracting state (EPC)

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