

Title (en)

The use of at least one cyclopentadienylmanganese tricarbonyl compound in a formulated lead free gasoline fuel.

Title (de)

Verwendung von mindestens einer Cyclopentadienyl/Manganverbindung in einem formulierten, bleifreien Benzin.

Title (fr)

Utilisation d'au moins un composé du type cyclopentadiényl-manganèse-tricarbonyle dans un carburant formulé sans plomb.

Publication

EP 0466512 B2 20030702 (EN)

Application

EP 91306360 A 19910712

Priority

US 55209090 A 19900713

Abstract (en)

[origin: EP0466512A1] Methods and compositions for reducing the maximum reactivity of exhaust products emitted by spark-ignition internal combustion engines. Gasoline having a minimum target octane number is formed by blending together base fuel blending components and at least one cyclopentadienyl manganese tricarbonyl compound in an amount equivalent to up to 1/32 gram of manganese per gallon. The manganese compound is used in lieu of an amount of one or more aromatic gasoline hydrocarbons required to achieve the same target octane number so that the maximum reactivity of the tailpipe exhaust products produced by the manganese-containing gasoline is less than the maximum reactivity of the tailpipe exhaust products produced by the same base fuel blending components not containing any such manganese compound but containing in lieu thereof an amount of one or more aromatic gasoline hydrocarbons required to achieve the same target octane number. There is thus provided a way of providing and using gasolines of suitable octane values while concomitantly reducing the potential for ground ozone formation, smog formation, and other grievous consequences of atmospheric pollution.

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C10L 1/30; C10L 1/02

IPC 8 full level

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CPC (source: EP)

C10L 1/023 (2013.01); **C10L 1/305** (2013.01); **C10L 10/02** (2013.01); **C10L 10/04** (2013.01); **C10L 10/10** (2013.01)

Cited by

US5551957A; EP1528097A3; EP0529942A1; AU663876B2; CN108699460A; EP3402864A4; US7332001B2; US8852299B2; US7276094B2; US8852298B2; US6629407B2; US6941743B2; US7101493B2; US6971337B2; US8006652B2; US7111591B2; EP2363450A1; US8715373B2; US8734540B2; EP2014745A1

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