

Title (en)  
A process for reducing atmospheric pollution

Title (de)  
Verfahren zur Verringerung von Luftverschmutzung

Title (fr)  
Un procédé pour réduire la pollution atmosphérique

Publication  
**EP 0529942 B1 19980506 (EN)**

Application  
**EP 92307609 A 19920820**

Priority  
US 74910191 A 19910823

Abstract (en)  
[origin: EP0529942A1] Methods and compositions for reducing toxic compounds emissions and 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 about 0.03 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 there is a more than proportionate decrease in toxic aromatic compounds in the tailpipe exhaust and 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 toxic compound emissions and the potential for ground ozone formation, smog formation, and other grievous consequences of atmospheric pollution.

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**C10L 1/30**; **C10L 10/02**

IPC 8 full level  
**C10L 1/30** (2006.01); **C10L 10/02** (2006.01)

CPC (source: EP)  
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Cited by  
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