

## Title (en)

Fuels containing a polyether amine for spark ignition engines.

## Title (de)

Polyetheramine enthaltende Kraftstoffe für Ottomotoren.

## Title (fr)

Combustibles contenant une polyétheramine pour moteur à allumage par étincelle.

## Publication

**EP 0310875 A1 19890412 (DE)**






## Application

**EP 88115566 A 19880922**



## Priority

DE 3732908 A 19870930

## Abstract (en)

Fuels for spark-ignition engines, containing small quantities of a polyether-amine of the formula I  in which R<1> is the radical of a monohydric or polyhydric alcohol or of an amine, each having 2 to 30 carbon atoms, X is an oxygen atom or an  group, in which R<4> is a second radical R<1> or a second radical  R<2> is the alkylene radical derived from propylene oxide or butylene oxide, m is one of the numbers 5 to 100 and R<3> is hydrogen or an alkyl radical having 1 to 20 carbon atoms, R<5> is hydrogen, and R<5> and R<3> can also each be the radical  the molecular weight Mn is 500 to 5000, the polyether-amines having been prepared by amination of polyethers of the formula II  in which R<1>, X, R<2> and m are as defined above, with ammonia or primary aliphatic amines, are novel ether-amine additives having an improved valve-cleaning action.

## Abstract (de)

Kraftstoffe für Ottomotoren, enthaltend geringe Mengen eines Polyetheramins der Formel I  in der R<1> den Rest eines ein oder mehrwertigen Alkohols, oder eines Amins jeweils mit 2 bis 30 Kohlenstoffatomen, X ein Sauerstoffatom oder eine - ??-Gruppe, in der R<4> für einen zweiten Rest R<1> oder einen zweiten Rest  R<2> den aus Propylen- oder Butylenoxid stammenden Alkylenrest, m die Zahlen 5 bis 100 und R<3> Wasserstoff oder einen Alkylrest mit 1 bis 20 Kohlenstoffatomen, R<5> Wasserstoff und R<5> und R<3> jeweils ferner den Rest R<1>-X-R<2> ?O-R<2>?m bedeuten können, das Molekulargewicht MN 500 bis 5000 beträgt und wobei die Polyetheramine durch Aminierung von Polyethern der Formel II R<1>-X-R<2> ?O-R<2>?mOH in der R<1>, X, R<2> und m die genannten Bedeutungen haben, mit Ammoniak oder primären aliphatischen Aminen hergestellt sind. Die neuen Etheramine-Additive bewirken eine verbesserte ventiltreinigende Wirkung.

## IPC 1-7

**C10L 1/22**

## IPC 8 full level

**C10L 1/22** (2006.01); **C10L 1/222** (2006.01); **C10L 1/234** (2006.01)

## CPC (source: EP)

**C10L 1/2225** (2013.01)

## Citation (search report)

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- [A] EP 0181140 A2 19860514 - ATLANTIC RICHFIELD CO [US]
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DOCDB simple family (application)  
**EP 88115566 A 19880922**; DE 3732908 A 19870930; JP 24265688 A 19880929