

Title (en)  
REDUCTION OF DIESEL EMISSIONS.

Title (de)  
VERMINDERUNG DER EMISSIONEN AUS DIESELMOTOREN.

Title (fr)  
REDUCTION DES DEGAGEMENTS DE MATIERES PARTICULAIRES PAR LES MOTEURS DIESEL.

Publication  
**EP 0616636 A1 19940928 (EN)**

Application  
**EP 92916215 A 19920729**

Priority  
• EP 9201712 W 19920729  
• GB 9116527 A 19910731

Abstract (en)  
[origin: WO9303126A1] Diesel engine particulate emissions can be reduced by the use of a crankcase lubricating composition having one or more of characteristics or components (a) to (e): (a) a relatively low high shear viscosity and a relatively low volatility; (b) a base oil giving a reduced ignition delay compared with that given by 150 solvent neutral; (c) a zinc content of zero or of not more than 0.06 mass % on an active ingredient basis; (d) a total sulphated ash (SASH) level of zero, or if one or more ash-producing additives are present, SASH level of not more than 0.8 mass % and a TBN to SASH ratio of less than 8.5; (e) at least one metal-containing detergent in which the metal has a first ionization potential lower than that of magnesium.

Abstract (fr)  
On peut réduire les dégagements de matières particulaires par les moteurs Diesel à l'aide d'une composition lubrifiante pour carter présentant un(e) ou plusieurs des caractéristiques ou constituants (a)-(e): (a) une viscosité de cisaillement élevé et une volatilité relativement faibles; (b) une huile de base assurant une réduction du délai d'allumage par rapport à celui du solvant 150 neutre; (c) une teneur en zinc nulle ou ne dépassant pas 0,06 % en masse en ce qui concerne les ingrédients actifs; (d) une teneur globale en cendre sulfatée (SASH) nulle ou, au cas où un ou plusieurs additifs produisant les cendres seraient présents, ne dépassant pas 0,8 % en masse, ainsi qu'un rapport indice de base totale/SASH inférieur à 8,5; et (e) au moins un détergent contenant du métal dans lequel le métal présente un premier potentiel d'ionisation inférieur à celui du magnésium.

IPC 1-7  
**C10M 177/00**; C10M 167/00; C10M 169/04

IPC 8 full level  
**C10M 167/00** (2006.01); **C10M 169/04** (2006.01); **C10M 177/00** (2006.01); F02B 3/06 (2006.01)

CPC (source: EP)  
**C10M 101/02** (2013.01); **C10M 105/32** (2013.01); **C10M 107/02** (2013.01); **C10M 129/40** (2013.01); **C10M 129/42** (2013.01); **C10M 133/12** (2013.01); **C10M 133/38** (2013.01); **C10M 133/52** (2013.01); **C10M 135/02** (2013.01); **C10M 135/18** (2013.01); **C10M 135/30** (2013.01); **C10M 135/36** (2013.01); **C10M 159/20** (2013.01); **C10M 159/22** (2013.01); **C10M 159/24** (2013.01); **C10M 167/00** (2013.01); **C10M 169/048** (2013.01); **C10M 177/00** (2013.01); C10M 2203/06 (2013.01); C10M 2203/10 (2013.01); C10M 2203/1006 (2013.01); C10M 2203/102 (2013.01); C10M 2203/1025 (2013.01); C10M 2203/1045 (2013.01); C10M 2203/1065 (2013.01); C10M 2203/108 (2013.01); C10M 2203/1085 (2013.01); C10M 2205/00 (2013.01); C10M 2205/0206 (2013.01); C10M 2205/026 (2013.01); C10M 2205/22 (2013.01); C10M 2207/027 (2013.01); C10M 2207/028 (2013.01); C10M 2207/123 (2013.01); C10M 2207/125 (2013.01); C10M 2207/126 (2013.01); C10M 2207/127 (2013.01); C10M 2207/129 (2013.01); C10M 2207/144 (2013.01); C10M 2207/146 (2013.01); C10M 2207/16 (2013.01); C10M 2207/22 (2013.01); C10M 2207/26 (2013.01); C10M 2207/262 (2013.01); C10M 2207/2805 (2013.01); C10M 2207/282 (2013.01); C10M 2207/289 (2013.01); C10M 2207/34 (2013.01); C10M 2207/345 (2013.01); C10M 2209/084 (2013.01); C10M 2209/086 (2013.01); C10M 2209/111 (2013.01); C10M 2215/04 (2013.01); C10M 2215/06 (2013.01); C10M 2215/064 (2013.01); C10M 2215/065 (2013.01); C10M 2215/066 (2013.01); C10M 2215/067 (2013.01); C10M 2215/068 (2013.01); C10M 2215/08 (2013.01); C10M 2215/082 (2013.01); C10M 2215/086 (2013.01); C10M 2215/22 (2013.01); C10M 2215/221 (2013.01); C10M 2215/225 (2013.01); C10M 2215/226 (2013.01); C10M 2215/24 (2013.01); C10M 2215/26 (2013.01); C10M 2215/28 (2013.01); C10M 2215/30 (2013.01); C10M 2217/046 (2013.01); C10M 2217/06 (2013.01); C10M 2219/02 (2013.01); C10M 2219/022 (2013.01); C10M 2219/024 (2013.01); C10M 2219/044 (2013.01); C10M 2219/046 (2013.01); C10M 2219/062 (2013.01); C10M 2219/066 (2013.01); C10M 2219/068 (2013.01); C10M 2219/082 (2013.01); C10M 2219/087 (2013.01); C10M 2219/088 (2013.01); C10M 2219/089 (2013.01); C10M 2219/10 (2013.01); C10M 2219/102 (2013.01); C10M 2219/104 (2013.01); C10M 2219/106 (2013.01); C10M 2219/108 (2013.01); C10M 2223/04 (2013.01); C10M 2223/042 (2013.01); C10M 2223/045 (2013.01); C10M 2223/065 (2013.01); C10M 2223/12 (2013.01); C10M 2225/04 (2013.01); C10M 2225/041 (2013.01); C10M 2227/061 (2013.01); C10M 2229/02 (2013.01); C10M 2229/041 (2013.01); C10M 2229/05 (2013.01); C10N 2010/02 (2013.01); C10N 2010/04 (2013.01); C10N 2020/01 (2020.05); C10N 2040/25 (2013.01); C10N 2040/251 (2020.05); C10N 2040/252 (2020.05); C10N 2040/253 (2020.05); C10N 2040/255 (2020.05); C10N 2040/28 (2013.01); F02B 3/06 (2013.01)

Citation (search report)  
See references of WO 9303126A1

Designated contracting state (EPC)  
BE DE ES FR GB IT NL

DOCDB simple family (publication)  
**WO 9303126 A1 19930218**; EP 0616636 A1 19940928; GB 9116527 D0 19910911

DOCDB simple family (application)  
**EP 9201712 W 19920729**; EP 92916215 A 19920729; GB 9116527 A 19910731