

Title (en)

SYNERGISTIC COMBINATION OF ADDITIVES USEFUL IN POWER TRANSMITTING COMPOSITIONS

Publication

EP 0348236 A3 19900214 (EN)

Application

EP 89306420 A 19890623

Priority

US 21142888 A 19880624

Abstract (en)

[origin: EP0348236A2] A mutually compatible combination of additives and their use to impart anti-wear, dispersancy and friction modification to power transmission compositions, particularly automatic transmission fluids, is disclosed. The additives comprise organic phosphite ester such as diolel monohydrogenphosphite; hydroxyl amine compound, such N-octadecyl diethanolamine, N-octadecyloxypropyldiethanol amine, or N-octadecylthiopropyl diethanolmine, and dispersant such as that derived by reacting a polyisobutenyl succinimide with a phosphosulfurized terpene, either alone or in combination with a borated, aminated dispersant such as that derived by reacting a polyisobutenyl succinimide with boric acid.

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IPC 8 full level

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Citation (search report)

- [AD] US 3484375 A 19691216 - HU SHIH-EN
- [AD] US 4129508 A 19781212 - FRIIHAUF EDWARD J
- [A] DE 1906038 A1 19700813 - HUELS CHEMISCHE WERKE AG
- [A] EP 0113199 A2 19840711 - EXXON RESEARCH ENGINEERING CO [US]
- [A] FR 1511554 A 19680202 - STANDARD OIL CO

Cited by

EP1739159A3; EP1516912A3; EP1739321A3; EP0593068A1; GB2285056A; GB2285056B; EP0646639A1; US5767044A; GB2257158A; GB2257158B; US5817605A; US10955009B2; US6613722B1; WO9839400A3; WO9621709A1

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