

Title (en)
Synthetic metalworking fluid.

Title (de)
Synthetische Metallbearbeitungsflüssigkeit.

Title (fr)
Fluide synthétique pour le travail des métaux.

Publication
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Application
EP 89313417 A 19891221

Priority
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Abstract (en)
A metalworking fluid comprising a polybutene and a polyether glycol which preferably has a carboxylate function. The metalworking fluid may or may not be diluted with water to form a micro-emulsion. The metalworking fluid provides excellent lubrication and cooling during the working of both hard and soft metals and can be free of extreme pressure additives.

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IPC 8 full level
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Citation (search report)
• [X] US 4260502 A 19810407 - SLANKER STEVEN R
• [A] US 3501404 A 19700317 - KLAIBER MORTON H, et al
• [A] US 4589990 A 19860520 - ZEHLER EUGENE R [US], et al

Cited by
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