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54 **Low phosphorus/low zinc lubricants.**

57 Lubricants having antiwear, corrosion inhibition and anti-oxidant performance appropriate to modern oil requirements with reduced or zero amounts of zinc and phosphorous and without the need for large amounts and/or expensive forms of antioxidant comprise 5 to 500 parts per million by weight (ppm) of added copper present in oil-soluble form, one or more added oil-soluble sulphur-containing compounds and a bearing corrosion inhibitor.

EP 0 280 579 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	GB-A- 779 825 (THE MOND NICKEL CO., LTD) * Whole document *	1-9,11-13,15-24	C 10 M 141/08 C 10 M 141/12 C 10 M 161/00
D,Y	US-A-2 343 756 (F.B. DOWNING et al.) * Whole document *	1-9,11-13,20,24	C 10 M 167/00 C 10 M 135/00 // (C 10 M 135/00) C 10 M 135:00)
X	US-A-4 595 514 (R.A. HOLSTEDT et al.) * Abstract; column 1, line 13 - column 21, lines 10,46 - column 25, line 3; examples 19,20,49,50,93; column 55, lines 7-42; claims 17-22,41-47,60-67,71-74,79,80 *	1-6,8,9,11-13,24	(C 10 M 141/08 C 10 M 129:26 C 10 M 129:10 C 10 M 135:00 C 10 M 133:52) (C 10 M 141/12)
Y	---	7,15-23	C 10 M 135:10 C 10 M 135:18
Y	WO-A-8 707 291 (THE LUBRIZOL CORP.) * Page 1, line 20 - page 4, line 28; page 6, lines 18-31; page 8, line 11 - page 9, lines 13,28 - page 10, lines 8,15-22; claims 1,7,11-14 *	2-5,7,9,17,20,21,23	C 10 M 135:00 C 10 M 139:00 -/-
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D,Y	US-A-4 629 580 (R.A. HOLSTEDT) * Abstract; column 1, line 58 - column 5, line 68; column 6, line 66 - column 8, line 2; column 10, line 51 - column 11, line 51; column 14, line 57 - column 15, line 43; column 18, line 33 - column 19, line 63; column 22, line 6 - column 25, line 12; examples 19,20,49-52,65,93; column 55, line 51 - column 56, line 57; claims 7-9 *	1-9,11-13,15-17,20-24	C 10 M
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13-12-1988	Examiner FISCHER W.H.F.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
D,Y	WO-A-8 604 601 (THE LUBRIZOL CORP.) * Abstract; page 1, line 5 - page 8, line 29; page 56, line 1 - page 72, line 14; claims 1,4,5,19-22,35 * ---	1-9,11-13,15-24	C 10 M 133:52) (C 10 M 161/00 C 10 M 129:26 C 10 M 129:10 C 10 M 135:00
D,Y	WO-A-8 604 602 (THE LUBRIZOL CORP.) * Abstract; page 1, line 4 - page 6, line 9; page 29, lines 11-33; page 33, line 7 - page 34, line 11; examples 13,14; claims 1,25,26,28 * ---	1,5-8,11-13,15-21	C 10 M 135:10 C 10 M 135:18 C 10 M 139:00 C 10 M 149:00) C 10 N 10:02 C 10 N 40:25
A	EP-A-0 092 946 (EXXON RESEARCH AND ENGINEERING) * Abstract; page 2, line 15 - page 6, lines 28-34 - page 7, line 10 * -----	2-7,17-20	
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CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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