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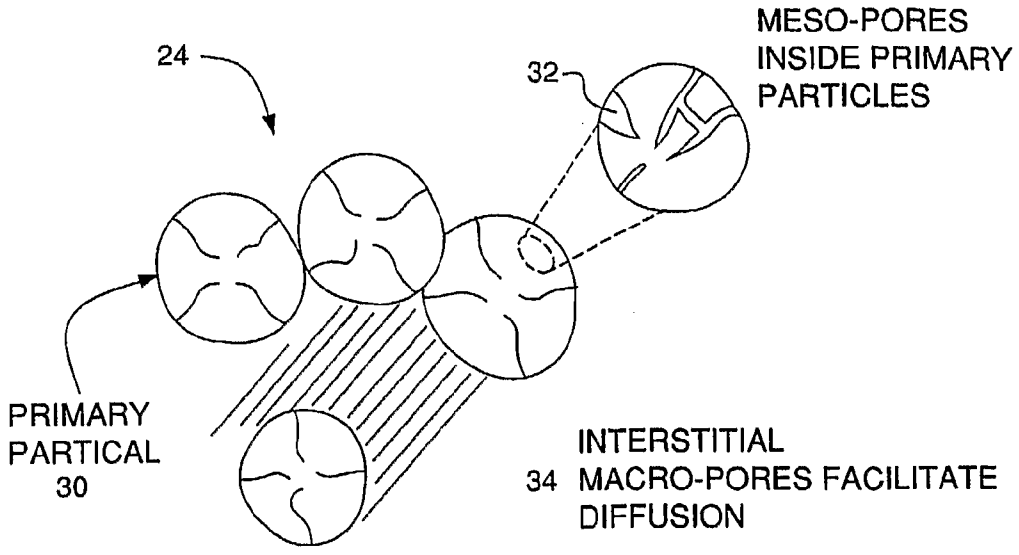
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(54) Title: MATERIALS AND PROCESSES FOR REDUCING COMBUSTION BY-PRODUCTS IN A LUBRICATION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE



(57) Abstract: A lubrication system having an oil filter modified to replace or supplement the performance of lubricant additives that may be used within an internal combustion engine to increase the performance of a lubricant is described. Oil filter is a chemical filter that includes filtration media (24) which includes particles(30) including an internal pores (32) formed within individual particles and interstitial pores (34) formed between adjacent particles (30) wherein the internal pores (32) and the interstitial pores (34) collectively define filtration media pores and a strong base material is associated with at least some of the internal pores (32). The filtration media (24) has a surface area greater than or equal to 25 square meters per gram that is derived from filtration media pores that are large enough to receive a combustion acid-weak base complex contained within oil flowing through the chemical filter.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC: **B01D 39/00**(2006.01)

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 210/209, 252, 258, 266, 483, 488, 490, 502.1, 503, 504, 505, 506, 507, 508

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,069,799 A (BROWNAWELL et al) 03 December 1991 (03.12.1991), see entire document.	1-5, 8-14, 19, 38, 42-43, 45, 47-49, 55
Y	US 5,112,482 A (SHAUB et al) 12 May 1992 (12.05.1992), see entire document.	1-5, 8-14, 19, 38, 42-43, 45, 47-49, 55
Y	US 5,478,463 A (BROWNAWELL et al) 26 December 1995 (26.12.1995), see entire document.	1-5, 8-14, 19, 38, 42-43, 45, 47-49, 55
Y	US 5,225,081 A (BROWNAWELL) 06 July 1993 (06.07.1993), see entire document.	1-5, 8-17, 19, 28, 38, 42-43, 45, 47-49, 55, 61

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