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(54) Title: METHOD OF ANALYZING AND MODIFYING LUBRICANT IN AN ENGINE

(57) Abstract: A method to employ instrumentation to effectuate variation in lubricant flow rate or properties in response to actual engine conditions. Preferably, the present invention provides a method for the *in situ* monitoring of the lubricating oil's *effectiveness* in a two-stroke diesel engine by measuring the used lubricant's Fe content and fuel sulfur content with XRF technology and the used lubricant's BN with an IR measurement device, and for efficiently modifying the lubricant's properties and/or flow rate to the equipment in response to the actual wear or corrosion needs of the machinery or engine.



WO 03/091550 A1