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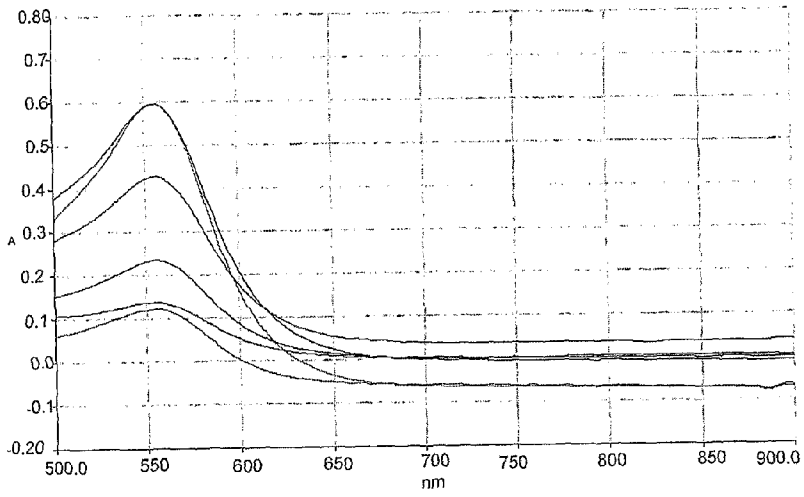
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(54) Title: METHOD AND TEST KIT FOR THE DETERMINATION OF IRON CONTENT OF IN-USE LUBRICANTS



(57) Abstract: Disclosed is a method for on-site determination of iron content of an in-use lubricant, comprising adding a predetermined amount of said in-use lubricant to an active solvent comprising predetermined amounts of an apolar organic solvent, a polar organic solvent, an organic acid water an iron complexing agent and a reducing agent, said active solvent having a pH between 2 and 4 thoroughly mixing the lubricant and the active solvent until the lubricant is completely dissolved, allowing the mixture to react completely and to separate into a top layer and a bottom layer holding the iron complex, filtering a portion of the bottom layer into a receptacle suitable for absorbance measurement in the visible range, photometrically measuring the net absorbance of the filtered solution at selected visible frequency and converting the absorbance measurement to ppm iron content of the lubricant The test kits for conducting the method are also disclosed.

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