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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 19943565.2 / 4 022 022 (71) Applicant: Valvoline Licensing and Intellectual Property LLC Lexington, KY 40509 (US)

(72) Inventor: BONTA, Jacob Lexington KY, 40509 (US)

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(54) COMPOSITION FOR USE IN CLEANING METAL COMPONENTS

(57) A composition for use in cleaning metal components having Hansen Solubility Parameters for the composition of $\delta_D \geq 15, \, \delta_P < 6, \, \text{and} \, \delta_H$ from about 5.5 to about 6.9. The composition includes a blend of organic solvents, none of which are classified as a volatile organic compound, a hazardous air pollutant, or a potential carcinogen, or exhibit a vapor pressure of less than 0.1 mmHg at 20°C. Further, the blend of organic solvents

includes a halogenated aromatic solvent having one or more halide groups and from 6 to 8 carbon atoms, an organic solvent having one or more ester functional group and from 3 to 9 carbon atoms, and one or more of a linear or branched hydrocarbon solvent with 6-12 carbon atoms with a single polar moiety head group or a solvent containing one or more ketone functional groups and from 2 to 5 carbon atoms.



Category

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EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT

Citation of document with indication, where appropriate,

* paragraph [12;39]; examples 2,3,5 *

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of relevant passages

AL) 23 October 2014 (2014-10-23)

ET AL) 18 March 1997 (1997-03-18) * abstract; column 1, lines 8-12;

The present search report has been drawn up for all claims

claims 1,4 *

Application Number

EP 24 19 9985

CLASSIFICATION OF THE APPLICATION (IPC)

INV.

C11D7/50

C11D11/00 C08J3/02

TECHNICAL FIELDS SEARCHED (IPC

C11D C08J C23G

Examiner

Douelle, Frédéric

Relevant

to claim

1-3,5-7

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CATEGORY OF CITED DOCUMENTS	
X : particularly relevant if taken alone Y : particularly relevant if combined with ano document of the same category A : technological background O : non-written disclosure P : intermediate document	ther

Place of search

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F : earlier patent document, but published on, or			

Date of completion of the search

23 January 2025

& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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23-01-2025

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