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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: PRETREATMENT COMPOSITIONS AND METHODS FOR COATING A METAL SUBSTRATE

(57) Abstract: Disclosed are methods for treating metal substrates, including ferrous substrates, such as cold rolled steel and electrogalvanized steel. The methods include contacting the substrate with a pretreatment composition that includes: (a) a group UIB and/or IVB metal an electropositive metal (c) free fluorine; (d) a metal fluoride salt formed from a metal which forms a fluoride salt having a pK_{sp} of at least 11; and (e) water.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 INV. C23C22/34 C23C22/36 C23C22/44 C23C22/73 C23C22/83
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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)
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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 practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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