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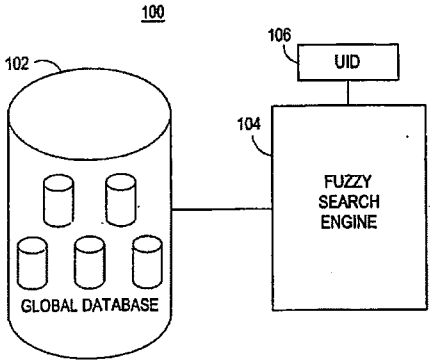
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— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,*

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR INTELLIGENT SEARCHING OF CRUDE OIL PROPERTIES AND KNOWLEDGE



(57) Abstract: A method and system for accessing crude refinement related information stored in a database for assessing and optimizing crude refinement are provided. A fuzzy search engine searches a database storing records of crude refinement related data, each record having at least one field. The fuzzy search engine receives at least one search request, respective search requests including search criteria including at least one search parameter specifying a field of the at least one field and a search criteria type corresponding to each search parameter specifying a target value and a relationship to the target value. The fuzzy search engine further includes are algorithm for computing for each respective search parameter a degree of membership value for individual records in accordance with at least one continuous varying function describing a degree of meeting the search criteria type corresponding to the respective search parameter by data stored in the field specified by the respective search parameter. The fuzzy search engine further includes an algorithm for computing a closeness value for each individual record in accordance with a function combining the degree of membership value for each respective search parameter.

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