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(71) Applicant *(for all designated States except US)*: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, New York, New York 10504 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **LUO, Jun** [CN/CN]; Building 19, Zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN). **TIAN, Qiming** [CN/CN]; Building 19, Zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN). **LV, Hairong** [CN/CN]; Building 19, Diamond Building A,zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN). **LV, Xinjie** [CN/CN]; Building 19, Zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN). **YIN, Wenjun** [CN/CN]; Building 19, Zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN). **DONG, Jin** [CN/CN]; Building 19, Zhongguancun Software Park, 8 Dongbeiwang West Road, Haidian District, Beijing 100193 (CN).

(74) Agent: **CCPIT PATENT AND TRADEMARK LAW OFFICE**; 8th Floor, Vantone New World Plaza, 2 Fuchengmenwai Street, Xicheng District, Beijing 100037 (CN).

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(54) Title: METHOD AND DEVICE FOR EXTRACTING SKELETON TOPOLOGY STRUCTURE FOR ELECTRIC POWER GRID

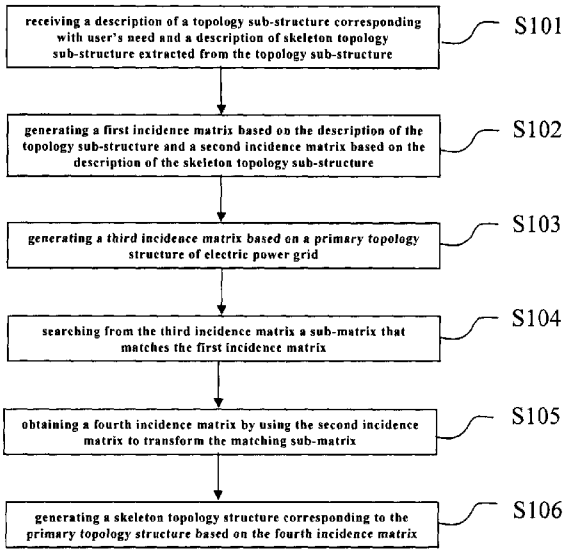

FIG. 1

(57) Abstract: A method and a device for extracting a skeleton topology structure for an electric power grid are provided. The method comprises: receiving a description of a topology sub-structure corresponding with user's need and a description of skeleton topology sub-structure extracted from the topology sub-structure (S101); generating a first incidence matrix based on the description of the topology sub-structure and a second incidence matrix based on the description of the skeleton topology sub-structure (S102); generating a third incidence matrix based on a primary topology structure of electric power grid (S103); searching from the third incidence matrix a sub-matrix that matches the first incidence matrix (S104); obtaining a fourth incidence matrix by using the second incidence matrix to transform the matching sub-matrix (S105); and generating a skeleton topology structure corresponding to the primary topology structure based on the fourth incidence matrix (S106). The method and the device for extracting skeleton topology structure can automatically and efficiently extract skeleton topology structure according to business needs.

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