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(54) **PROCESS FOR IDENTIFYING
POLYCRYSTALLINE MATERIALS BY
ELECTRON DIFFRACTION**

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G06F 17/00 (2006.01)
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(52) **U.S. Cl.** **702/27**; 423/718

(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

A relational database is built and used for the identification of polycrystalline solids by electron diffraction. Selected area electron diffraction (SAED) patterns (rings) produced in an electron diffractometer or a transmission electron microscope (TEM) are matched against database patterns calculated from reduced unit cells of known materials. The effects of double diffraction on electron diffraction patterns are fully incorporated into the database.

2 Claims, No Drawings