

ABSTRACT

**CATALYST HAVING SURFACE-MODIFIED METAL NANOPARTICLES
IMMOBILIZED IN STATIONARY PHASE IN WHICH A POLYMER
5 ELECTROLYTE MEMBRANE IS FORMED, AND PREPARATION METHOD
THEREOF**

The present invention relates to a catalyst having surface-modified metal nanoparticles immobilized in a stationary phase in which a polymer electrolyte membrane is formed, and a
10 preparation method thereof. The catalyst of the present invention may be used in a process for producing hydrogen peroxide by direct synthesis from oxygen and hydrogen.

Fig. 1