TITLE OF INVENTION: [CURRENT COLLECTOR FOR ELECTRICAL ENERGY STORAGE DEVICE AND METHOD OF FABRICATION THEREOF]

ABSTRACT

A current collector for an electrode of an electrical energy storage device, the current collector comprising: a sheet of conductive metal having a modified first surface for providing positive ions thereon to be in contact with an electrolyte in the electrical energy storage device, wherein the modified first surface has a three-dimensional structure with increased surface area. A method of fabricating a current collector for an electrode of an electrical energy storage device, the method comprising: a) providing a sheet of conductive metal; and b) modifying a first surface of the sheet of conductive metal using at least one of: a mechanical process, an optical process, a plasma process and a chemical process to create a modified first surface having a three-dimensional structure with increased surface area.

[FIG. 2]