

Abstract

The present invention provides an electrolysis device, electrolysis system, and electrolysis method for alternating current induction power supply. The electrolysis device comprises: at least one group of magnetic circuits and an electrolytic cell, wherein the magnetic circuits comprise a magnetic core on which an electromagnetic coil is wound, the magnetic core being provided outside the electrolytic cell; and the magnetic circuits are used for using an alternating current power source to generate a rotating magnetic field surrounding the electrolytic cell, the rotating magnetic field acting on an electrolyte in the electrolytic cell to generate an induction direct current, such that the electrolyte is electrolyzed. According to the electrolysis device, the electrolytic cell generates the induction direct current directly by means of an alternating current, such that alternating current and direct current conversion links are reduced, and energy loss caused by energy conversion is reduced.