

ELECTROLYTIC BATH FOR MANUFACTURING ACIDIC WATER AND USE OF THE ACIDIC WATER

ABSTRACT

5 An electrolytic bath for manufacturing acidic water capable of ensuring
sufficient conductivity thorough wide surfaces of electrodes and stability of the
surfaces of the electrodes to electrolyze tap water as well as RO water or DI water,
especially, by coupling electrodes having the same polarity as one to apply a power
source to the electrodes having the same polarity at the same time without using an
10 additional catalytic agent or ion exchange resin, and use of the acidic water are
provided. Although water having physical properties such as acidity and oxidizing
power can be obtained at a positive pole and water having physical properties such as
alkalinity and reducing power can be obtained at a negative pole when electrolysis is
performed using a catalytic agent in a conventional electrolytic bath, an electrolytic
15 bath for manufacturing acidic water capable of obtaining water having the physical
properties of acidity and reducing power (acidic reduced water) at a cathode and
water having the physical properties of acidity and oxidizing power (acidic oxidized
water) at a positive pole without using a catalytic agent, and use of the acidic water
are also provided. In particular, an electrolytic bath for manufacturing acidic water
20 capable of obtaining a high concentration of acidic water by further forming mesh
electrodes having a polarity different from the plurality of electrodes on a surface of
an ion exchange membrane to widen an area of the electrodes and minimize a
distance between the electrodes, thereby further facilitating a redox reaction, and use
of the acidic water are provided.

25 FIG. 1