

ABSTRACT

WATER IONIZER INCLUDING STACKED ELECTROLYZER AND FLOW SWITCHING
DEVICE, WITH INLET BEING SEPARATE FROM OUTLET

5

A water ionizer includes a stacked electrolyzer and a flow switching device, with an inlet being separate from an outlet. Water entering an input regulator is distributed at a predetermined ratio before being supplied to an electrolyzer
10 module to minimize acidic water to be discarded. Water supplied from the input regulator is directed to pass through the electrolyzer module in a crossing manner to delay flows of water to improve the efficiency of electrolysis. Electrolyzer cells are stacked on and fitted to each other to simplify an
15 assembly process and improve convenience. Electrode plates of the electrolyzer module are fixedly fitted into a frame to facilitate an assembly process and improve a fabrication process. The input regulator and a flow switching output unit are connected via a connecting shaft to synchronize the
20 operations thereof to obtain reliability.

Figure 1