

ABSTRACT

CATION EXCHANGE MEMBRANE, ELECTROLYSIS VESSEL USING THE SAME AND METHOD FOR PRODUCING CATION EXCHANGE MEMBRANE

Provided is a cation exchange membrane having excellent mechanical strength against folding and the like and capable of delivering stable electrolytic performance for a long time, an electrolysis vessel using the cation exchange membrane and a method for producing the cation exchange membrane. A cation exchange membrane 1 at least includes: a membrane body containing a fluorine-based polymer having an ion-exchange group; and two or more reinforcing core materials arranged approximately in parallel within the membrane body. The membrane body is provided with two or more elution holes 12 formed between the reinforcing core materials 10 adjacent to each other. In addition, assuming that a distance between the reinforcing core materials 10 adjacent to each other is represented by a, a distance between the reinforcing core materials 10 and the elution holes 12 adjacent to each other is represented by b, a distance between the elution holes 12 adjacent to each other is represented by c, and the number of the elution holes 12 formed between the reinforcing core materials 10 adjacent to each other is represented by n, then a, b, c, and n satisfying the relationship represented by the following expression (1) or expression (2) are at least present.

$$b > a/(n+1) \dots (1)$$

$$c > a/(n+1) \dots (2)$$

FIG. 2