

Method for concentrating an aqueous hydrogen peroxide solution

5 Abstract:

In a process for concentrating aqueous hydrogen peroxide solution to give two hydrogen peroxide streams of different concentration in an apparatus comprising a
10 preevaporator (1), a distillation column (2) and a vapour compressor (3), in which the aqueous hydrogen peroxide solution to be concentrated (4) is continuously fed into the preevaporator, vapour (5) produced by evaporation in the preevaporator is fed to
15 the distillation column, bottom product (6) obtained in the preevaporator is withdrawn as a first concentrated hydrogen peroxide stream (7), vapour (8) produced in the distillation column is withdrawn from the distillation column at the top of the column,
20 compressed by means of the vapour compressor and used for heating the preevaporator and the bottom product (9) obtained in the distillation column is withdrawn as a second concentrated hydrogen peroxide stream (10),
25 two concentrated hydrogen peroxide solutions having differing concentrations in the range from 50 to 70% by weight of hydrogen peroxide can be produced at the same time in a freely selectable ratio by feeding part of the bottom product obtained in the preevaporator in liquid form to the distillation column.

30

(Fig. 2)