

MULTI-EFFECT EVAPORATOR

ABSTRACT

A multi-effect evaporator (10), having an upstream and a downstream end, adapted for distillation of water. It comprises a plurality of effects (20a a20d) connected in a series manner and arranged into groups. Each group has a common parallel water feed inlet adapted to supply all effects in the group with feed water. The evaporator further includes a main feed water line (11) in fluid communication with the most upstream group. An array of heaters (24) is disposed along the line, adapted for heating the feed water before its entry into the effects of the latter group. Each effect comprises means for forwarding the second outlet vapor into one of the heaters for heating the feed water. Each group comprises a pump (21) adapted to extract the concentrate (23) from the effects of the group and pump it into the common parallel water feed of an adjacent downstream group.

FIGURE 1