



Patent Letter, Sweden

The Swedish Patent and Registration Office
has, in accordance with the Patents Act,
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the enclosed patent document.

A handwritten signature in black ink, appearing to read "Susanne Ås Sivborg". The signature is fluid and cursive, with a large, stylized initial letter.

Susanne Ås Sivborg



Sweden

(12) Patent specification

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(54) Title: Method and apparatus to reduce waste production in an isolation process
(56) Cited documents: US 5716496 A · US 4132640 A
(57) Abstract:

There is disclosed a method and an apparatus for reducing the amount of waste, in a process involving vaporization, in an evaporator apparatus (1-6, V1-V6), of a water solution containing environmentally hazardous substances. A considerable amount of the water content of said water solution is vaporized in a reusable vaporization chamber (2a), the water content of said water solution being vaporized into vapor, which is released, possibly after condensation into water, to an ambient system. At a certain time, the vaporization process is stopped, the water content in the vaporization chamber (2a) being reduced by 30% to 95%, so that the remaining water content is 70% to 5% of the initial water content. Thereafter, in a second step, the remaining water solution in the reusable vaporization chamber (2a) is transferred into a separate waste isolating container (6), where the remaining water is subjected to at least one further water-reducing process, so that the water content is further reduced by 10% to 100%. The combined water-reduction in the reusable vaporization chamber (2a) and the waste container (6) is such as to leave a final water content in the waste container (6) of 10% to 0% of the initial water content. The remaining waste, including the environmentally hazardous substances, is retained in the waste isolating container. In this way, the production of waste material is reduced significantly.

