

APPARATUS FOR MANUFACTURING NITROGEN-CONCENTRATED LIQUID
FERTILIZER USING LIVESTOCK MANURE, AND MANUFACTURING METHOD
OF NITROGEN-CONCENTRATED LIQUID FERTILIZER USING THE SAME

ABSTRACT

Provided is an apparatus for manufacturing a nitrogen-concentrated liquid fertilizer including: a reaction tank heating livestock manure accommodated therein under reduced pressure to extract vapor containing a nitrogen active ingredient; a cooling part condensing the vapor containing the nitrogen active ingredient extracted in the reaction tank to discharge a condensate; a recovery tank recovering the condensate discharged from the cooling part; and a control part controlling a temperature and pressure of the reaction tank, wherein the reaction tank includes a bubble filtration part disposed at a central portion thereof to remove bubbles of the livestock manure generated at the time of heating the livestock manure under the reduced pressure, the bubble filtration part including a bubble filter convexly protruding downwardly along a central axis of the reaction tank.

Figure 2