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(54) **Title:** INTEGRATED DECANter AND CENTRIFUGE SEPARATOR FOR THREE-PHASE SEPARATION

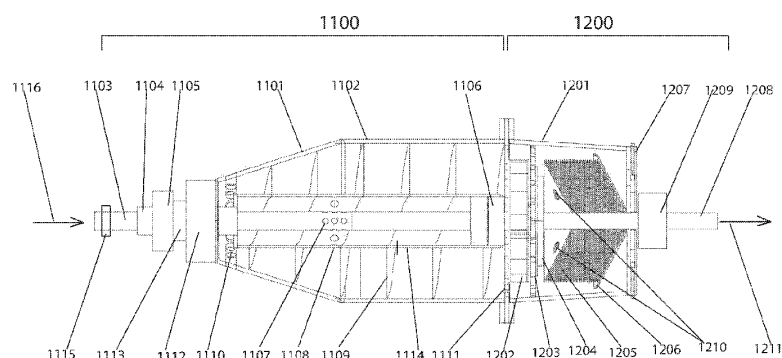


Figure 1

(57) **Abstract:** An apparatus for the separation of solid component, heavy and light density liquid components of a slurry, comprising a decanter section comprising a screw conveyor enclosed by a decanter house and a centrifuge section comprising a disc centrifuge. The centrifuge section is enclosed by a centrifuge house, the decanter section and centrifuge section are separated by an intersection comprising a stationary impeller for transmitting liquid from the decanter section to the centrifuge section. The screw conveyor, decanter house and centrifuge house are rotatable around a central axial shaft. The decanter section an axially arranged inlet and a solid material outlet, the centrifuge section comprises an axially central first liquid outlet for lighter liquid and second liquid outlets for heavier liquid. The second liquid outlets can be arranged on an end plate of the centrifuge house, with the radial distance of the second outlets from the central axis being adjustable.

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