



(51) International Patent Classification:

B04B 5/04 (2006.01) **A61M 1/36** (2006.01)
B01D 21/26 (2006.01)

(21) International Application Number:

PCT/AU2019/050036

(22) International Filing Date:

22 January 2019 (22.01.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2018900191 22 January 2018 (22.01.2018) AU
2018903959 19 October 2018 (19.10.2018) AU

(71) Applicant: **SCINOGY PRODUCTS PTY LTD**
[AU/AU]; 59 Finlayson Avenue, Mount Martha, Victoria
3934 (AU).

(72) Inventors: **JAMES, David. WILSON, Stephen. FITZ-
PATRICK, Ian.**

(74) Agent: **GRIFFITH HACK**; GPO Box 4164, Sydney, New
South Wales 2001 (AU).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SYSTEM, METHOD AND CONTROLLER FOR RECOVERY OF CONCENTRATED PARTICLES SUSPENDED IN FLUID

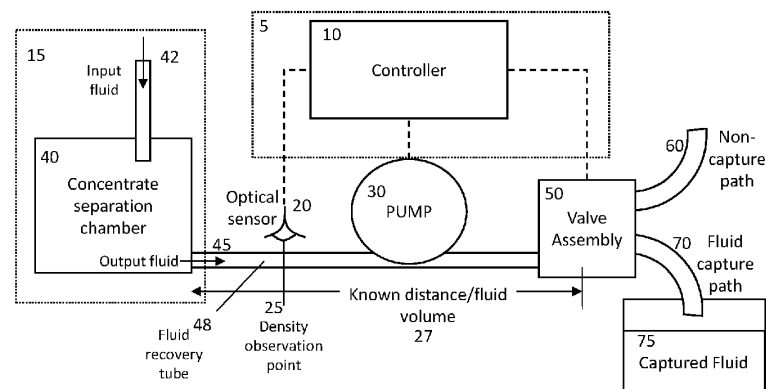


Figure 1

(57) Abstract: Embodiments provide a fluid recovery system and method for use with concentrator systems for concentrating particles suspended in a fluid and where this suspension is recovered from a fluid stream drawn from the concentrator system. A controller is configured to control valve actuation to direct concentrate being drawn from the concentrator chamber through a recovery tube to a recovery reservoir based on fluid volume movement. The system can use a density sensor to detect density transitions in fluid in the fluid recovery tube to identify leading and trailing edges of a portion of concentrated particles in fluid suspension passing through the recovery tube and actuate recovery valves based on objectives for maximising particle recovery with minimal dilution.