



(51) International Patent Classification:

B08B 3/08 (2006.01) **B08B 7/00** (2006.01)
B08B 3/10 (2006.01)

(21) International Application Number:

PCT/US2023/011555

(22) International Filing Date:

25 January 2023 (25.01.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/303,237 26 January 2022 (26.01.2022) US

(71) Applicant: **ULTRA CLEAN HOLDINGS, INC.**
[US/US]; 26462 Corporate Avenue, Hayward, California
94545 (US).

(72) Inventors: **AITCHISON, Kenneth Allen**; 22742 Town
Crier Rd., Calabasas, California 91302 (US). **DEEM, John
Gilbert**; 7962 East Downing Circle, Mesa, Arizona 85207
(US).

(74) Agent: **VERPLANCKEN, Donald et al.**; PATTERSON +
SHERIDAN LLP, 24 Greenway Plaza, Suite 1600, Hous-
ton, Texas 77046 (US).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE,
KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
LY, MA, MD, 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, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, CV,
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, ME, 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).

(54) Title: COATING REMOVAL SYSTEM AND METHODS OF OPERATING SAME

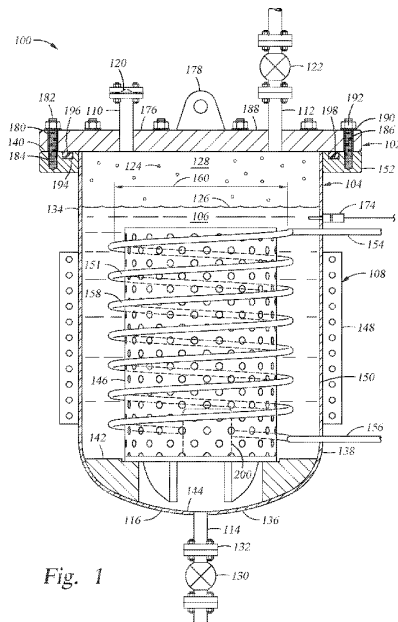


Fig. 1

(57) Abstract: A coating removal process includes providing a coating removal vessel (100) having a sealable processing volume (106) therein, providing a coating removal fluid (126), which reacts with the coating, at an elevated temperature above the ambient temperature surrounding the removal vessel, in the sealable processing volume (106), locating a component having a coating thereon to be removed in the processing volume, sealing the sealable process volume (106) from the ambient surrounding the processing volume, heating the coating removal fluid (126) to a temperature greater than the boiling point thereof at the pressure of the surrounding ambient, removing the coating from the component using the coating removal fluid (126) at the temperature greater than the boiling point thereof at the pressure of the surrounding ambient, reducing the temperature of the coating removal fluid (126) to a temperature less than the boiling point thereof at the pressure of the surrounding ambient, venting the sealable volume (106) to the surrounding ambient, and removing the component from the processing volume (106).

[Continued on next page]

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*