

- (51) International Patent Classification:

E03F 5/14 (2006.01)
- (21) International Application Number:

PCT/US2023/069587
- (22) International Filing Date:

03 July 2023 (03.07.2023)
- (25) Filing Language:

English
- (26) Publication Language:

English
- (30) Priority Data:

17/810,782 05 July 2022 (05.07.2022) US
- (71) Applicant: STORMTRAP, LLC [US/US]; 1287 Windham Parkway, Romeoville, Illinois 60446 (US).
- (72) Inventors: WILLIAMS, Gregory; 1287 Windham Parkway, Romeoville, Illinois 60446 (US). FAJMAN, Dan; 1287 Windham Parkway, Romeoville, Illinois 60446 (US). MORAN, Robert J.; 1287 Windham Parkway, Romeoville, Illinois 60446 (US). MATTESON, Luke; 1287 Windham Parkway, Romeoville, Illinois 60446 (US).
- (74) Agent: KING, Robert A.; 77 West Wacker Drive, Suite 3100, c/o Greenberg Traurig, LLP, Chicago, Illinois 60601 (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, MU, 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, SC, 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).
- Published:

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

(54) Title: CROSSFLOW SETTING DEVICES AND METHODS OF USE

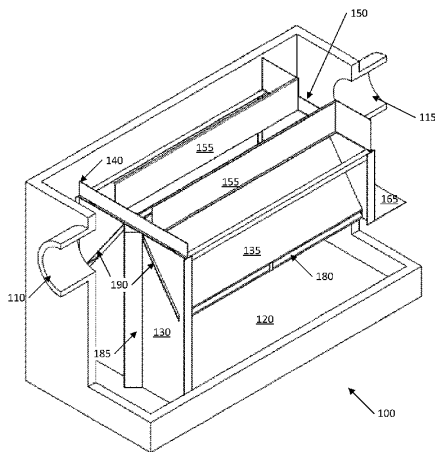


FIGURE 1

(57) Abstract: A stormwater treatment device may include a crossflow settling device having a treatment channel defined by a front baffle, a rear baffle, and a pairs angled plates provided at supplementary angles therebetween and disposed between the front baffle and the rear baffle, the front baffle having a treatment channel opening and the rear baffle having a treatment channel outlet. Under normal flow, stormwater flows into the inlet and into the inlet chamber, into the treatment channel via the treatment channel opening, into the outlet chamber via the treatment channel outlet in a cross-flow pattern causing the sediment to fall out of suspension, and out of the crossflow setting device through openings at the bottom of the pairs of angled plates.