

(51) International Patent Classification:
F04D 25/08 (2006.01) *F04D 27/00* (2006.01)(21) International Application Number:
PCT/US2013/067828(22) International Filing Date:
31 October 2013 (31.10.2013)

(25) Filing Language: English

(26) Publication Language: English

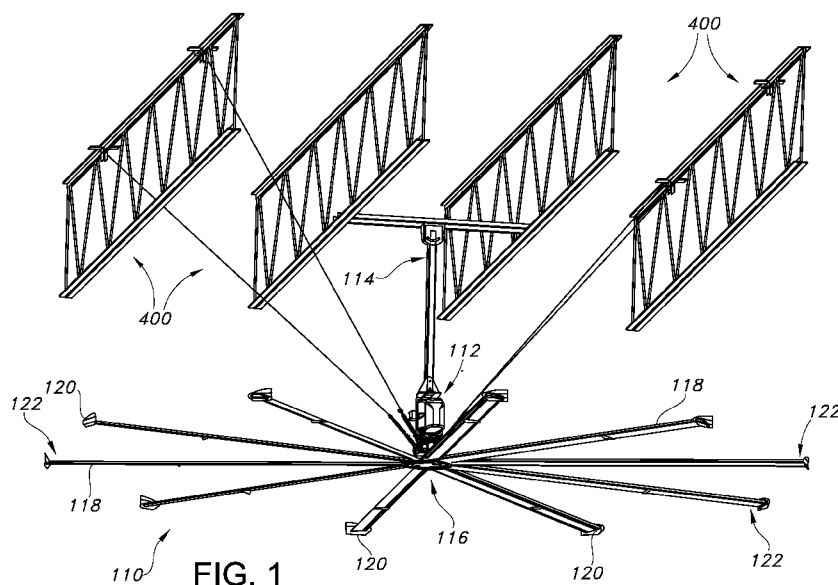
(30) Priority Data:
61/720,679 31 October 2012 (31.10.2012) US
61/755,627 23 January 2013 (23.01.2013) US
61/807,903 3 April 2013 (03.04.2013) US(71) Applicant: DELTA T CORPORATION [US/US]; 2348
Innovation Drive, Lexington, KY 40511 (US).(72) Inventors: DESMET, James, M.; 11500 Arbor Ct.,
Louisville, KY 40223 (US). TABER, Christian, R.; 351
Greenbriar Rd., Lexington, KY 40503 (US). BANKS,
David, R.; 300 Pelican Lane, Lexington, KY 40511 (US).
HOLLAN, C., Jason; 336 Valley Brook Drive, Lexington,
KY 40511 (US). SMITH, J., Carey; 3860 Gloucester
Drive, Lexington, KY 40510 (US). QUINN, Ed; 2348 In-
novation Drive, Lexington, KY 40511 (US). LESSER,
Thomas; 2348 Innovation Drive, Lexington, KY 40511
(US).(74) Agent: DORISIO, Andrew, D.; King & Schickli, PLLC,
247 North Broadway, Lexington, KY 40507 (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, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, 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, 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))

[Continued on next page]

(54) Title: INTEGRATED THERMAL COMFORT CONTROL SYSTEM UTILIZING CIRCULATING FANS



(57) Abstract: A system for providing thermal comfort for a person within a space comprising a plurality of interconnected zones, such as a single room in a residence, commercial establishment, or industrial location. At least one fan is positioned in each zone, which may be an overhead fan mounted to a ceiling common to two or more of the zones, and a sensor is provided for sensing a condition in at least one of the zones. A controller is adapted for controlling the fan in the at least one zone independent of another fan based on the sensed condition in the at least one zone including the controlled fan. Related aspects of a thermal comfort control system and methods are also disclosed.



-
- *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))*