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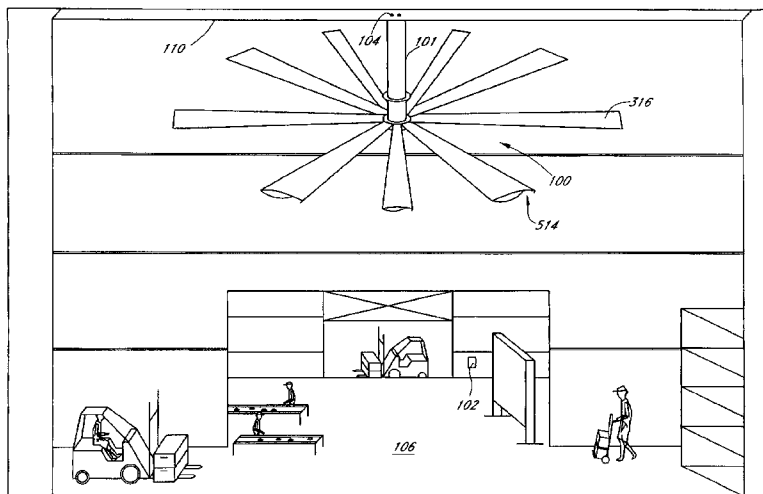
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(54) Title: COOLING FAN WITH REINFORCED BLADE



(57) Abstract: A circulator device comprising a large diameter fan having reinforced fan blades with a tapered airfoil shape is disclosed. The fan blades may be formed using an extrusion method of fabrication, wherein each fan blade (316) may comprise a reinforced trailing edge (514) with a downwardly extending flange. The benefit of forming each fan blade with a reinforced trailing edge (514) of the present invention results in improved structural characteristics such that the trailing edge of each fan blade (316) may be fabricated longer so as to improve aerodynamic performance. Also, the reinforced trailing edge resists tearing that may occur during extrusion by adding the bent flanged region to at least one distal end of the trailing edge. For example, the bent portion (538) of the trailing edge tends to rigidly orient the extruded material in a stabilized position more readily during formation.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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