



- (51) **International Patent Classification:**
C12N 9/10 (2006.01) *C12P 5/00* (2006.01)
- (21) **International Application Number:**
PCT/US2012/071518
- (22) **International Filing Date:**
21 December 2012 (21.12.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/580,163 23 December 2011 (23.12.2011) US
61/639,855 27 April 2012 (27.04.2012) US
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(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, IS, JP, KE, KG, KM, 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, 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, ML, MR, NE, SN, TD, TG).

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))
- with sequence listing part of description (Rule 5.2(a))

(54) **Title:** ENHANCED PRODUCTION OF ISOPRENE USING HOST CELLS HAVING DECREASED ISPA ACTIVITY

Farnesyl diphosphate synthase (IspA) expression analysis

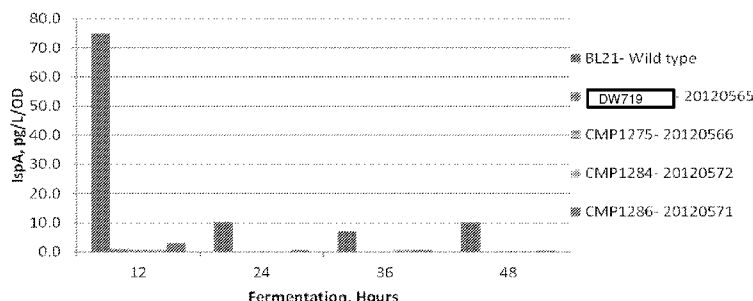


Figure 27

(57) **Abstract:** This invention relates to recombinant microorganisms capable of producing isoprene and isoprene production with the use of such recombinant microorganism with good efficiency. In this invention, functional activity of the *ispA* gene is altered to reduce the production of isoprenoid molecules in recombinant cells engineered to produce isoprene or in cells otherwise susceptible to isoprenoid accumulation during fermentation. This decreased *ispA* gene functional activity enables enhanced synthesis of isoprene in a host microorganism.

