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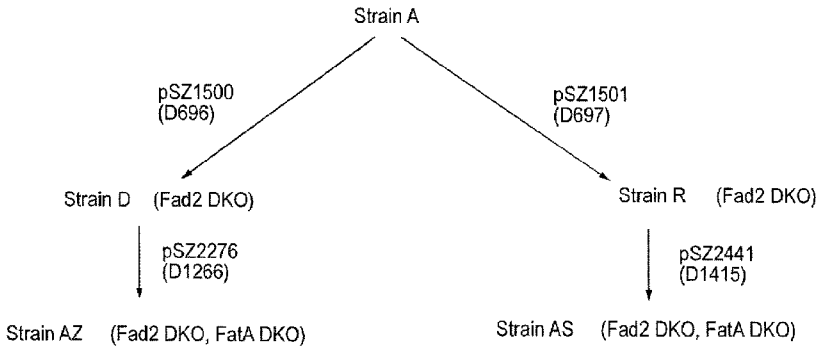
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[Continued on next page]

(54) Title: TAILORED OILS



pSZ1500 (D696): FAD2 5'::CrTUB2-ScUC2-CvNR:PmAMT3-CpSADtp-CtOTE-CvNR::FAD2 3'
pSZ1501 (D697): FAD2 5'::CrTUB2-ScUC2-CvNR:PmTUB2-CpSADtp-CtOTE-CvNR::FAD2 3'
pSZ2276 (D1296): FAD2 5'::CpACT-AtTHIC-CvNR:PmAMT3-PmKASII-CvNR::FATA 3'
pSZ2441 (D1415): FAD2 5'::CpACT-AtTHIC-CvNR:PmUAPA1-PmKASII-CvNR::FATA 3'

FIG. 24

(57) Abstract: Recombinant DNA techniques are used to produce oleaginous recombinant cells that produce triglyceride oils having desired fatty acid profiles and regiospecific or stereospecific profiles. Genes manipulated include those encoding stearoyl-ACP desaturase, delta 12 fatty acid desaturase, acyl-ACP thioesterase, ketoacyl-ACP synthase, and lysophosphatidic acid acyltransferase. The oil produced can have enhanced oxidative or thermal stability, or can be useful as a frying oil, shortening, roll-in shortening, tempering fat, cocoa butter replacement, as a lubricant, or as a feedstock for various chemical processes. The fatty acid profile can be enriched in midchain profiles or the oil can be enriched in triglycerides of the saturated-unsaturated-saturated type.

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