

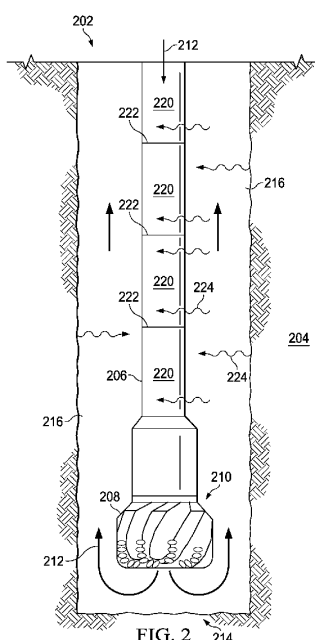


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- (81) Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.
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- (54)
- Title:**
- COOLING FOR GEOTHERMAL WELL DRILLING



(57) Abstract: A method for drilling a geothermal well in a subterranean zone includes drilling, with a drill string, a wellbore of the geothermal well in the subterranean zone. An inherent temperature of the rock adjacent a rock face at a downhole end of the wellbore is at least 250 degrees Celsius. While drilling, a drilling fluid is flowed at a temperature at the rock face such that a difference between the inherent temperature of the rock adjacent the rock face and the temperature of the drilling fluid at the rock face is at least 100 degrees Celsius.

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