



(43) International Publication Date  
30 May 2013 (30.05.2013)

(10) International Publication Number  
**WO 2013/078378 A1**

- (51) **International Patent Classification:**  
*C07K 16/24* (2006.01) *G01N 33/68* (2006.01)  
*C12Q 1/68* (2006.01)
- (21) **International Application Number:**  
PCT/US2012/066348
- (22) **International Filing Date:**  
21 November 2012 (21.11.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
61/563,357 23 November 2011 (23.11.2011) US  
61/616,846 28 March 2012 (28.03.2012) US  
61/651,900 25 May 2012 (25.05.2012) US
- (71) **Applicant:** AMGEN INC. [US/US]; One Amgen Center Drive, Thousand Oaks, California 91320-1799 (US).
- (72) **Inventors:** WELCHER, Andrew A.; 1175 Church Street, Ventura, California 93001 (US). BOEDIGHEIMER, Michael J.; 3192 Holloway Court, Newbury Park, California 91320 (US). CHUNG, James B.; 3369 Crossland Street, Thousand Oaks, California 91362 (US).
- (74) **Agent:** SWEENEY, Rosemary; Amgen Inc., Law Dept., 1201 Amgen Court West, Seattle, Washington 98119-3105 (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, 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).

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

**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:** METHODS OF TREATMENT USING AN ANTIBODY AGAINST INTERFERON GAMMA

(57) **Abstract:** The invention encompasses methods of treatment of interferon gamma (IFN- $\gamma$ )-mediated diseases using IFN- $\gamma$  inhibitors, such as anti-huIFN- $\gamma$  antibodies, wherein levels of expression of one or more biomarkers are determined either before administration of the IFN- $\gamma$  inhibitor and/or after administration. Also contemplated are methods of treatment using particular, pharmacodynamically effective doses of an anti-huIFN- $\gamma$  antibody.



WO 2013/078378 A1