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(54) **RECOMBINANT CHIMERIC HUMAN ANTI-BOTULINUM ANTIBODIES**

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(52) **U.S. Cl.** **530/388.4; 435/7.4**

(58) **Field of Classification Search** None
See application file for complete search history.

(56) **References Cited**
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(57) **ABSTRACT**

In this application is described the production of recombinant, chimeric, humanized antibodies specific for both BoNT/A and BoNT/B. The humanized antibodies were converted from a mouse anti-BoNT/A/B Fab fragment into a whole human IgG1 antibody. The antibodies are useful in assays for detecting human exposure to BoNT/A and BoNT/B.

13 Claims, 7 Drawing Sheets