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(54) Title: HUMAN MONOCLONAL ANTIBODIES TO HER2/NEU

(57) Abstract: Isolated human monoclonal antibodies and antigen-binding portions thereof which specifically bind to HER2/neu are disclosed. Also disclosed are bi- and multispecific molecules including human monoclonal antibodies and antigen-binding portions thereof which specifically bind to HER2/neu. The human antibodies can be produced in a non-human transgenic animal, e.g., a transgenic mouse, capable of producing multiple isotypes of human monoclonal antibodies by undergoing V-D-J recombination and isotype switching. Also disclosed are pharmaceutical compositions comprising the human antibodies, non-human transgenic animals and hybridomas which produce the human antibodies, and therapeutic and diagnostic methods for using the human antibodies.