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(54) **CHIMERIC RECEPTOR WITH NKG2D SPECIFICITY FOR USE IN CELL THERAPY AGAINST CANCER AND INFECTIOUS DISEASE**

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CPC ***A61K 35/17*** (2013.01); ***A61K 38/00*** (2013.01); ***C07K 14/7051*** (2013.01); ***C07K 14/7056*** (2013.01); ***C12N 5/0646*** (2013.01); *C07K 2319/00* (2013.01)

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

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(57) **ABSTRACT**

The invention provides a chimeric receptor comprising NKG2D, DAP10 and CD3 zeta. Also disclosed is a composition comprising this chimeric receptor and methods for making and using it to enhance the cytotoxicity and antitumor capacity of NK cells. The invention also encompasses methods for the use of NKG2D-DAP10-CD3 zeta polypeptides, vectors and cells in methods for treating cancer and other proliferative disorders, as well as infectious diseases.

22 Claims, 7 Drawing Sheets