

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MILTENYI BIOMEDICINE GmbH and MILTENYI BIOTEC INC.
Petitioner

v.

THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA
Patent Owner

IPR Trial No. IPR2022 -
U.S. Patent No. 9,464,140
Issue Date: October 11, 2016

Title: Compositions and Methods for Treatment of Cancer

**PETITION FOR INTER PARTES REVIEW OF
U.S. PATENT NO. 9,464,140**

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XI. GROUND 1: INDEPENDENT CLAIM 1 AND DEPENDENT CLAIMS 2, 6, 8-9, 11, 16, 21-22, AND 27-28 ARE RENDERED OBVIOUS BY CAMPANA IN VIEW OF NICHOLSON, HONSIK, AND CART-19 CLINICALTRIALS.GOV20

A. Independent Claim 120

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a. “[d] wherein T cells comprise a nucleic acid sequence encoding a chimeric antigen receptor (CAR)”22

b. “[e] wherein the CAR comprises a CD19 antigen binding domain comprising, from the amino to the carboxy terminus, a light chain variable region and a heavy chain variable region of SEQ ID NO: 20”23

c. “[f] wherein the CAR further comprises a transmembrane domain, a 4-1BB costimulatory signaling region, and a CD3 zeta signaling domain”27

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b. “[b] administering to the human patient a pharmaceutical composition...”29

c. “[c] anti-tumor effective amount of a population of human T cells”30

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