US 20220056477A1

(19) United States

(12) Patent Application Publication

van der Loo et al.

(10) Pub. No.: US 2022/0056477 A1

(43) Pub. Date: Feb. 24, 2022

(54) **FOAMY VIRAL VECTOR COMPOSITIONS AND METHODS FOR THE MANUFACTURE OF SAME**

(71) Applicant: **Children's Hospital Medical Center**, Cincinnati, OH (US)

(72) Inventors: **Johannes C.M. van der Loo**, Newtown Square, PA (US); **David William Russell**, Seattle, WA (US); **Punam Malik**, Cincinnati, OH (US); **Md Nasimuzzaman**, Cincinnati, OH (US)

(21) Appl. No.: **17/345,127**

(22) Filed: **Jun. 11, 2021**

Related U.S. Application Data

(63) Continuation of application No. 16/562,578, filed on Sep. 6, 2019, now abandoned, which is a continuation of application No. 15/041,087, filed on Feb. 11, 2016, now abandoned.

(60) Provisional application No. 62/127,956, filed on Mar. 4, 2015.

Publication Classification

(51) **Int. Cl.**

C12N 15/86 (2006.01)

C12N 7/00 (2006.01)

(52) **U.S. Cl.**

CPC ***C12N 15/86*** (2013.01); *C12N 2740/17051* (2013.01); *C12N 2740/17043* (2013.01); ***C12N 7/00*** (2013.01)

(57) **ABSTRACT**

Disclosed are methods of preparing FV vector particles. In some aspects, the disclosed methods may include the steps of transfecting a population of eukaryotic cells by contacting said population of eukaryotic cells with one or more transfection reagents to form a transfection mixture, and incubating the transfection mixture to form a transfected cell population; harvesting the FV vector particles from said transfected cell population; purifying the FV vector particles; and concentrating the FV vector particles.