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(54) **VIRAL VECTORS WITH MODIFIED TRANSDUCTION PROFILES AND METHODS OF MAKING AND USING THE SAME**

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See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides AAV capsid proteins, virus capsids comprising said capsid proteins and virus vectors comprising said capsid proteins, wherein the AAV capsid proteins have one or more mutations, wherein the mutation(s) result in a phenotype of decreased liver transduction and/or reduced glycan binding affinity as compared to a control. The invention also provides methods of administering the virus vectors and virus capsids of the invention to a cell or to a subject.

20 Claims, 16 Drawing Sheets