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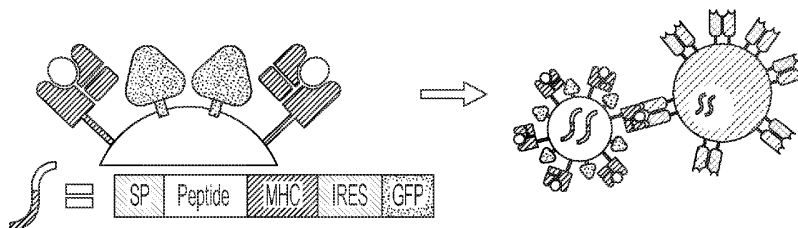


FIG. 2

(57) Abstract: Disclosed herein are compositions of retroviruses and methods of using the same for gene delivery, wherein the retroviruses comprise a viral envelope protein comprising at least one mutation that diminishes its native function, a non-viral membrane-bound protein comprising a membrane-bound domain and an extracellular targeting domain.