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(71) Applicant (for all designated States except US): **ARROW-HEAD RESEARCH CORPORATION** [US/US]; 225 South Lake Avenue, 3rd Floor, Pasadena, CA 91101 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROZEMA, David, B.** [US/US]; 9418 Whippoorwill Way, Middleton, WI 53562 (US). **LEWIS, David, L.** [US/US]; 505 Maple Ave., Madison, WI 53704 (US). **WAKEFIELD, Darren, H.** [US/US]; 3168 Stoneman Drive, Fitchburg, WI 53711 (US). **KITAS, Eric, A.** [AU/CH]; Eichbergweg 4, CH-4147 Aesch BL (CH). **HADWIGER, Philipp** [AT/DE]; Heinrich-Hoffmann-strasse 17, 95326 Kuimbach (DE). **WOLFF, Jon, A.** [US/US]; 3506 Lake Mendota Drive, Madison, WI 53705 (US). **ROEHL, Ingo** [DE/DE]; Am Bohen Kreuz 1, 96117 Memmelsdorf (DE). **MOHR, Peter** [CH/CH]; Benkenstrasse 26, CH-4054 Basel (CH). **HOFFMANN, Torsten** [DE/DE]; Kleinhueningerstrasse 15, 79576 Well Am Rhein (DE). **JAHN-HOFMANN, Kerstin** [DE/DE]; Stoltzstrasse 39, 63263 Neu-Isenburg (DE). **MUELLER, Hans, Martin** [DE/DE]; Westendstrasse 30,

80339 Muenchen (DE). **OTT, Guenther** [DE/DE]; Muenckerstrasse 32, 95444 Bayreuth (DE). **BLOKHIN, Andrei, V.** [US/US]; 5770 Dawley Drive, Fitchburg, WI 53711 (US). **CARLSON, Jeffrey, C.** [US/US]; 303 N. Hamilton #309, Madison, WI 53703 (US). **BENSON, Jonathan, D.** [US/US]; 701 Hoel Avenue, Stoughton, WI 53589 (US).

(74) Agent: **MILLS, Jeffrey K.**; Fanelli Haag PLLC, 1909 K Street, N.W., Suite 1120, Washington, D.C. 20006 (US).

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(54) Title: IN VIVO POLYNUCLEOTIDE DELIVERY CONJUGATES HAVING ENZYME SENSITIVE LINKAGES

(57) Abstract: The present invention is directed compositions for delivery of RNA interference (RNAi) polynucleotides to cells in vivo. The compositions comprise amphipathic membrane active polyamines reversibly modified with enzyme cleavable dipeptide-amidobenzyl-carbonate masking agents. Modification masks membrane activity of the polymer while reversibility provides physiological responsiveness. The reversibly modified polyamines (dynamic polyconjugate or DPC) are further covalently linked to an RNAi polynucleotide or co-administered with a targeted RNAi polynucleotide-targeting molecule conjugate.



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