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(21) International Application Number: PCT/US97/20696 (22) International Filing Date: 7 November 1997 (07.11.97) (30) Priority Data: ① 08/745,023 / 7 November 1996 (07.11.96) / US (71) Applicant: THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY (US/US); (Office of Technology Licensing) Suite 350, 900 Welch Road, Palo Alto, CA 94304 (US). (72) Inventors: ① MANN, Micheal, J.; 42 Lincoln Road, Newton, MA 02158 (US); ② DZAU, Victor, J.; 110 Dudley Road, Newton, MA 02159 (US); ③ GIBBONS, Gary, H.; 168 Burlington Street, Lexington, MA 02173 (US). (74) Agent: CLARK, Paul, T.; Clark & Elbing LLP, 176 Federal Street, Boston, MA 02110-2214 (US).		(81) Designated States: AU, BR, CA, CN, CZ, HU, ID, IL, JP, KR, MX, NO, NZ, PL, RU, SG , UA, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> 1 PD. 1 Applⁿ. 3 INVS. IPC = C12M 3/04 C12P 15/00

(54) Title: **PRESSURE-MEDIATED INTRACELLULAR DELIVERY OF MOLECULES OR MICROPARTICLES**

(57) Abstract

The invention provides a method of enhancing the uptake by a cell of an atom, a molecule, or particle of <10 μm . The method involves (a) bringing into contact a cell and a liquid medium containing the atom, molecule, or particle, (b) maintaining the cell and the liquid medium in an enclosed space, and (c) subjecting the enclosed cell and liquid medium to an incubation pressure sufficient to enhance the uptake by the cell of the atom, molecule, or particle.