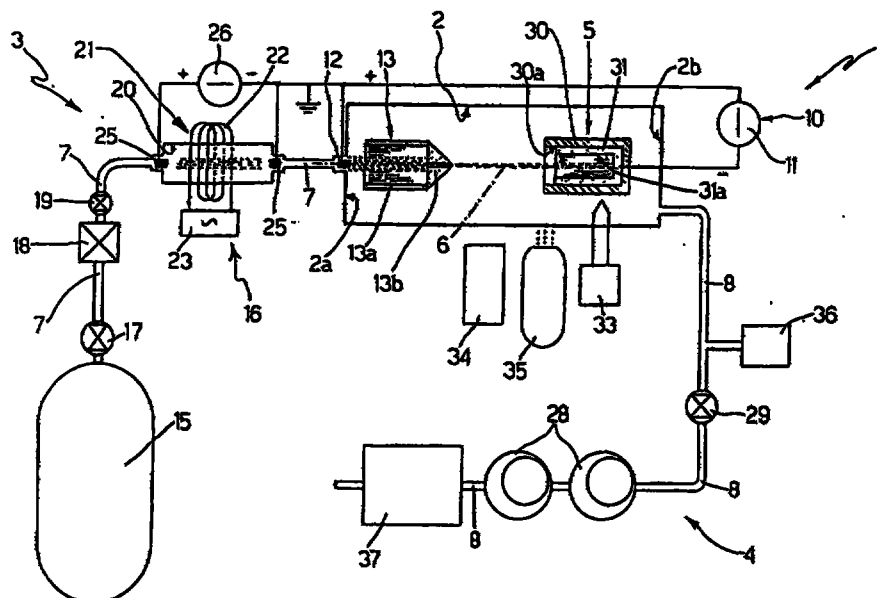




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G21B 1/00, H05H 1/22, 6/00	A1	(11) International Publication Number: WO 98/43249 (43) International Publication Date: 1 October 1998 (01.10.98)
(21) International Application Number: PCT/IB98/00388 (22) International Filing Date: 19 March 1998 (19.03.98) (30) Priority Data: BO97A000169 20 March 1997 (20.03.97) IT (71) Applicant (for all designated States except US): CAPPELLI, David, Anthony [US/US]; 55852 Riverdale Drive, Elkhart, IN 46514 (US). (71)(72) Applicant and Inventor: BOSCOLI, Renzo [IT/IT]; Via dei Cacciatori, 4460, I-40010 Palata Pepoli (IT). (74) Agents: JORIO, Paolo et al.; Studio Torta, S.r.l., Via Viotti, 9, I-10121 Torino (IT).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: METHOD AND MACHINE FOR PRODUCING ENERGY BY NUCLEAR FUSION REACTIONS



(57) Abstract

An experimental machine (1) for producing low-temperature nuclear fusion reactions, wherein an ion source (3) feeds a flux of positive deuterium ions to a reaction chamber (2) housing a target (5) defined by active elements (30, 31) and by an aggregate of metal sulfates hydrated with heavy water; a pumping assembly (4) being provided to maintain a vacuum in the reaction chamber (2); and the reaction chamber (2) having an accelerating device (10) for accelerating the positive deuterium ions, and which generates an electric field inside the reaction chamber (2) to convey and accelerate the deuterium ions against the active element of the target (5) in such a manner as to initiate nuclear fusion reactions between the incident deuterium ions and some of the atoms of the active element.