



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12N 15/29, C12P 21/00, C12Q 1/25	A1	(11) International Publication Number: WO 99/53070 (43) International Publication Date: 21 October 1999 (21.10.99)
(21) International Application Number: PCT/US99/08151 (22) International Filing Date: 13 April 1999 (13.04.99) (30) Priority Data: 09/060,726 15 April 1998 (15.04.98) US (71) Applicant: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES [US/US]; 10010 N. Torrey Pines Road, La Jolla, CA 92037 (US). (72) Inventor: WEIGEL, Detlef; 601 Santa Helena, Solana Beach, CA 92075 (US). (74) Agent: HAILE, Lisa, A.; Fish & Richardson P.C., Suite 1400, 4225 Executive Drive, La Jolla, CA 92037 (US).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, 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, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
(54) Title: FLOWERING LOCUS T (FT) AND GENETICALLY MODIFIED PLANTS HAVING MODULATED FLOWER DEVELOPMENT (57) Abstract The present invention provides a gene, termed "FT" for flowering locus T, and a polypeptide encoded by FT that modulates flower development in plants. FT is useful in methods of the invention for producing genetically modified plants characterized as having the phenotypic trait of modulated flower development, for example early or delayed flowering. Such plants can be genetically modified by nucleic acids encoding functional FT peptides; at least one antisense nucleic acid for FT; a structural gene that encodes wild-type FT polypeptide; or a structural gene that encodes dominant negative polypeptides, for example, in order to modulate flowering in the plant.		