

Title (en)  
TRANSGENIC CARNATIONS EXHIBIT PROLONGED POST-HARVEST LIFE

Title (de)  
TRANSGENE NELKEN MIT LÄNGERER LEBENSDAUER NACH DER ERNTE

Title (fr)  
ILLETS TRANSGENIQUES PRESENTANT UNE VIE PROLONGEE APRES RECOLTE

Publication  
**EP 0824591 A4 19990512 (EN)**

Application  
**EP 96911869 A 19960509**

Priority  
• AU 9600286 W 19960509  
• AU PN286295 A 19950509

Abstract (en)  
[origin: WO9635792A1] The present invention relates generally to transgenic plants which exhibit prolonged post-harvest life properties. More particularly, the present invention is directed to transgenic carnation plants modified to reduce expression of one or more enzymes associated with the ethylene biosynthetic pathway. Flowers of such carnation plants do not produce ethylene, or produce ethylene in reduced amounts, and are, therefore, capable of surviving longer post-harvest than flowers of non-genetically modified, naturally-occurring carnation plants.

IPC 1-7  
**C12N 15/53**; **C12N 15/60**; **A01H 5/02**

IPC 8 full level  
**A01H 5/00** (2006.01); **C12N 9/02** (2006.01); **C12N 9/88** (2006.01); **C12N 15/09** (2006.01); **C12N 15/53** (2006.01); **C12N 15/82** (2006.01)

CPC (source: EP)  
**C12N 9/0071** (2013.01); **C12N 9/88** (2013.01); **C12N 15/8205** (2013.01); **C12N 15/8249** (2013.01)

Citation (search report)  
• [X] WO 9101375 A1 19910207 - ICI PLC [GB]  
• [PX] WO 9607742 A1 19960314 - ASGROW SEED CO [US], et al  
• [E] WO 9621027 A1 19960711 - ASGROW SEED CO [US], et al  
• [X] MICHAEL M Z ET AL: "CLONING OF ETHYLENE BIOSYNTHETIC GENES INVOLVED IN PETA SENESCENCE OF CARNATION AND PETUNIA, AND THEIR ANTISENSE EXPRESSION IN TRANSGENIC PLANTS", CURRENT PLANT SCIENCE AND BIOTECHNOLOGY IN AGRICULTURE, vol. 16, 1993, pages 298 - 303, XP002014398  
• [X] BOVY,A.G., ET AL.: "genetic modification of the vase-life of carnation", ACTA HORTICULTURAE - SIXTH INTERNATIONAL SYMPOSIUM ON POSTHARVEST PHYSIOLOGY OF ORNAMENTAL PLANTS, vol. 405, 1995, pages 179 - 189, XP002096435  
• [A] MICHAEL,M.Z.: "isolation of petal senescence-associated cDNA clones encoding 1-aminocyclopropane-1-carboxylate synthase from Petunia hybrida and Dianthus caryophyllus", EMBL SEQUENCE DATA LIBRARY, 9 December 1992 (1992-12-09), heidelberg, germany, XP002095861  
• [A] SAVIN, K.W., ET AL.: "antisense ACC oxidase RNA delays Carnation petal senescence", EMBL SEQUENCE DATA LIBRARY, 11 August 1994 (1994-08-11), heidelberg, germany, XP002095862  
• [A] HENSKENS,J.A.M., ET AL.: "molecular cloning of two different ACC synthase PCR fragments in carnation flowers and organ-specific expression of the corresponding genes", PLANT MOLECULAR BIOLOGY, vol. 26, 1994, pages 453 - 458, XP002095863  
• See references of WO 9635792A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9635792 A1 19961114**; AU PN286295 A0 19950706; EA 199700369 A1 19980625; EP 0824591 A1 19980225; EP 0824591 A4 19990512; JP H11504815 A 19990511

DOCDB simple family (application)  
**AU 9600286 W 19960509**; AU PN286295 A 19950509; EA 199700369 A 19960509; EP 96911869 A 19960509; JP 53360896 A 19960509