

## Title (en)

PRODUCTION OF RECOMBINANT POLYPEPTIDES BY BOVINE SPECIES AND TRANSGENIC METHODS.

## Title (de)

HERSTELLUNG VON REKOMBINANTPOLYPEPTIDEN DURCH RUNDERARTEN UND TRANSGENE VERFAHREN.

## Title (fr)

PRODUCTION DE POLYPEPTIDES RECOMBINES PAR DES ESPECES BOVINES ET DES PROCEDES TRANSGENIQUES.

## Publication

**EP 0652889 A4 19970507 (EN)**

## Application

**EP 93915365 A 19930615**

## Priority

- US 9305724 W 19930615
- US 89895692 A 19920615

## Abstract (en)

[origin: WO9325567A1] A transgene for producing recombinant polypeptides in the milk of transgenic bovine species comprises at least one expression regulation sequence, a secretory DNA sequence encoding a secretory signal sequence which is functional in mammary secretory cells of the bovine species and a recombinant DNA sequence encoding the recombinant polypeptide. Also included are methods for producing transgenic bovine species. The method includes introducing the above transgene into an embryonal target cell of a bovine species, transplanting the transgenic embryonic target cell formed thereby into a recipient bovine parent and indentifying at least one female offspring which is capable of producing the recombinant polypeptide in its milk. The invention also includes transgenic bovine species as well as the milk from such transgenic bovine species. Methods are also provided for producing transgenic non-human mammals having a desirable phenotype. The method comprises first methylating a transgene followed by introduction into fertilized oocytes. The oocytes are then cultured to form pre-implantation embryos. Thereafter, at least one cell is removed from each of the pre-implantation embryos and the DNA digested with a restriction endonuclease capable of cleaving the methylated transgene but incapable of cleaving the unmethylated form of the transgene.

## IPC 1-7

**C07H 21/00**; **C12N 15/00**; **A23C 9/00**; **A01N 1/02**

## IPC 8 full level

**A01K 67/027** (2006.01); **A23C 9/14** (2006.01); **A23C 9/20** (2006.01); **A61K 48/00** (2006.01); **A61P 15/00** (2006.01); **C07H 21/04** (2006.01); **C07K 14/47** (2006.01); **C07K 14/765** (2006.01); **C07K 14/79** (2006.01); **C12N 9/36** (2006.01); **C12N 9/64** (2006.01); **C12N 15/09** (2006.01); **C12N 15/85** (2006.01); **C12P 21/02** (2006.01)

## CPC (source: EP)

**A01K 67/0278** (2013.01); **A23C 9/20** (2013.01); **A61P 15/00** (2017.12); **C07K 14/4732** (2013.01); **C07K 14/765** (2013.01); **C07K 14/79** (2013.01); **C12N 9/2462** (2013.01); **C12N 9/6464** (2013.01); **C12N 15/85** (2013.01); **C12N 15/8509** (2013.01); **C12Y 304/21069** (2013.01); **A01K 2207/15** (2013.01); **A01K 2217/00** (2013.01); **A01K 2217/05** (2013.01); **A01K 2227/101** (2013.01); **A01K 2227/105** (2013.01); **A01K 2267/01** (2013.01); **C12N 2830/008** (2013.01); **C12N 2830/85** (2013.01)

## Citation (search report)

- [X] WO 9108216 A1 19910613 - GENPHARM INT [US]
- [X] EP 0451823 A2 19911016 - CONSORTIUM ELEKTROCHEM IND [DE]
- [E] WO 9315196 A1 19930805 - SYMBICOM AB [SE]
- [X] KRIMPENFORT P. ET AL.: "Generation of transgenic dairy cattle using 'in vitro' embryo production", BIO/TECHNOLOGY, vol. 9, September 1991 (1991-09-01), pages 844 - 847, XP002025739
- See references of WO 9325567A1

## Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**WO 9325567 A1 19931223**; AU 4537393 A 19940104; EP 0652889 A1 19950517; EP 0652889 A4 19970507; JP 3670003 B2 20050713; JP H08504562 A 19960521

## DOCDB simple family (application)

**US 9305724 W 19930615**; AU 4537393 A 19930615; EP 93915365 A 19930615; JP 50179494 A 19930615