

INFORME DE BÚSQUEDA DE PATENTES PARA EL Radicado N° 14-136125-00000-0000						
CRITERIOS PARA LA BÚSQUEDA (anexar pantallazo o reporte en PDF, junto con los booleanos utilizados)						
Palabras clave utilizadas		Recombinant herpesvirus of turkeys (HVT), vector HVT, vaccine , Newcastle Disease Virus F (NDV – F), avian pathogens, IBDV VP2 antigen				
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		A61K 039/012.				
BASES DE DATOS CONSULTADAS.						
Patentscope		Google/patents				
NCBI		PatBase				
Espacenet						
Lens						
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS (documentos patentes, literatura no patente etc...)						
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda(relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA	
					SI	NO
PCT INTERNATIONAL SEARCH REPORT EPO	20/Marzo/2013	US5980906	1 – 5,8 - 11,13 – 15, 18 - 26, 28 - 34	Novedad/ Nivel inventivo	X	
		WO2008/038845	2 – 5, 11 – 20, 22 - 34	Nivel inventivo		X
		FR2751225	2 – 5, 11 – 20, 22 - 34	Nivel inventivo		X
		Zelnik Vladimir <i>et al.</i> , 1995. "Structure and properties of a herpesvirus of turkeys recombinant in which US1, US10 and SORF3 genes have been replaced by a lacZ expression cassette"	15, 25, 30	Nivel inventivo		X
		EP1298139	8 – 10, 18 - 20	Nivel inventivo		X
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.						
WO2002036617A2						
US6699479						
US5187087						
FR2751225A1						
US5187087						
US5853733						
US5980906						
US6221362						
US2010183664						
WO9410321						
Bublot M. <i>et al.</i> , 2007. Use of a Vectored Vaccine against Infectious Bursal Disease of Chickens in the Face of High-Titred Maternally Derived Antibody						
BÚSQUEDA DE SECUENCIAS						
Número de depósito / patente y N° de secuencia						
% de identidad						

SEQ ID NO (de la solicitud)	NCBI	The Lens	EMBL-EBI	DDJB	Genome Quest
SEQ ID NO: 35	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 92% de identidad				
SEQ ID NO: 37	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 89% de identidad				
SEQ ID NO: 33	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 91% de identidad				
SEQ ID NO: 6	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 88% de identidad				
SEQ ID NO: 4	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 89% de identidad				
SEQ ID NO: 2	US5853733 SEC ID NO: 13. Secuencia de aminoácidos presenta un 89% de identidad				
SEQ ID NO: 8	GenBank: CAA02337.1				

Búsqueda en PatBase

10) Family number: 3447033 (US5266489A)

Title: Recombinant **herpesviruses**, in particular for the production of **vaccines**, process for preparing them, plasmids produced during this process and **vaccines** obtained

Abstract: Source: US5266489A PCT No. PCT/FR91/00184 Sec. 371 Date Jan. 3, 1992 Sec. 102(e) Date Jan. 3, 1992 PCT Filed Mar. 7, 1991 PCT Pub. No. WO91/13995 PCT Pub. Date Sep. 19, 1991. The recombinant virus chosen from the turkey **herpesvirus** (HVT), Aujeszky's disease virus (PRV), infectious bovine rhinotracheitis virus (IBRV), feline infectious rhinotracheitis virus (FHV), equine rhinopneumonitis virus (EHV), canine **herpesvirus** (CHV), duck **herpesvirus**, human simplex **herpesvirus** (HSV), varicella virus (VZV), Epstein-Barr virus (EBV), cytomegalovirus (CMV), comprises at least one heterologous gene, coding particularly for a viral, bacterial or parasitic immunogen inserted in the region of the genome of the said virus corresponding to the gene of the small sub-unit RR2 of ribonucleotide reductase so that it may be expressed. The method for preparing a virus of this type involves inserting the heterologous gene into the said region of the genome, particularly after partial or total deletion of this region. The recombinant virus obtained may be used particularly for preparing living **vaccines**. The small sub-unit of the ribonucleotide reductase of the turkey **herpesvirus** (HVT) has been sequenced.

Classifications:
International (IPC 8-9): A61K39/00 A61K39/012 A61K39/102 A61K39/108 A61K39/17 A61K39/245 A61K39/255 A61K39/265 A61P31/04 A61P31/12 A61P31/22 C07K14/03 C07K14/125 C12N15/09 C12N15/38 C12N15/53 C12N15/86 C12N15/869 C12N7/00 C12N7/01 (Advanced/Invention); A61K39/00 A61K39/102 A61K39/108 A61K39/245 C12N15/09 C12N7/00 C12R1/92 (Advanced/Non-invention); A61K39/00 A61K39/002 A61K39/102 A61K39/108 A61K39/155 A61K39/245 A61P31/00 C07K14/005 C12N15/09 C12N15/34 C12N15/869 C12N7/00 (Core/Invention); A61K39/00 (Core/Non-invention)
International (IPC 1-7): A61K39/00 A61K39/002 A61K39/012 A61K39/102 A61K39/108 A61K39/12 A61K39/17 A61K39/215 A61K39/245 A61K39/25 A61K39/255 A61K39/265 A61K39/275 C07K13/00 C07K14/00 C12N15/38 C12N15/53 C12N15/85 C12N15/86 C12N7/01 C12N9/02 C12R1/92
CPC: C07K14/005 C12N15/86 A61K39/00 C12N2710/16722 C12N2710/16743 C12N2760/18122
European: C07K14/005 C12N15/86 A61K39/00 M07K207/00 M12N710/16722 M12N710/16743 M12N760/18122
US: 424/199.1 424/229.1 435/235.1 435/320.1 435/463 435/465 435/69.1 435/69.3 536/23.72

13) Family number: 7965630 (JP4200384A)

Title: INSERTION MUTANT OF **HERPESVIRUS** OF TURKEYS

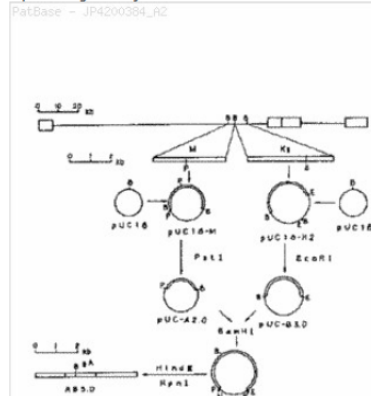
Abstract: Source: JP4200384A **PURPOSE:** To improve the effect of a **vaccine** for chickens by inserting a foreign gene into a gene region unessential for growth of **Herpesvirus** of Turkey (HVT). **CONSTITUTION:** HVT gene DNA containing HVT antigen (gA) gene is treated with a restriction enzyme and subsequently cloned to plasmid pUC 18 to obtain pUC 18M and pUC 18-K2. The resultant two plasmids are mutually bonded to obtain the first recombinant vector pUC-AB 5.0 (A). A LacZ gene fragment, etc., of β -galactosidase of colibacillus is then inserted thereto under control by a promoter of the component (A) to obtain the second recombinant vector pUC-AB 5.0 Z (B). The (B) component is subsequently introduced into a chicken embryo fibroblast (C), etc., infected with HVT, thus producing the objective insertion mutant of HVT.

Classifications:

International (IPC 8-9): C12N15/09 C12N15/38 C12N15/86 C12N7/00 C12N7/01 (Advanced/Invention);

C12N15/09 C12N15/34 C12N15/86 C12N7/00 C12N7/01 (Core/Invention)

International (IPC 1-7): C12N15/38 C12N15/86 C12N7/01



1) Family number: 117666 (US3642574A)

Title: METHOD FOR PRODUCING **VACCINE** FOR IMMUNIZATION OF POULTRY AGAINST MAREK{3 S DISEASE

Abstract: Source: US3642574A A **vaccine** is produced from a turkey **herpesvirus** which is nonpathogenic in chickens but immunizes against Marek's disease.

Classifications:

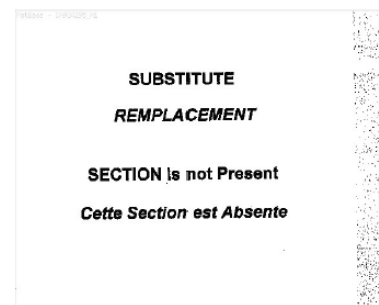
International (IPC 8-9): A61K39/255 C12N7/00 (Advanced/Invention); A61K39/245 C12N7/00 (Core/Invention)

International (IPC 1-7): A61D A61K23/00 A61K27/00 A61K39/245 A61K39/255 A61K39/32 A61K9/00 C12K5/00 C12K7/00 C12K9/00 C12N7/00

CPC: A61K2039/5254 A61K2039/552 C12N2710/16334 A61K39/255 A61K39/12

European: A61K39/255

US: 195/1.1 195/1.3 195/1.5 424/229.1 424/89 435/173.7 435/237



3) Family number: 29181997 (US4673572A)

Title: LIVE PURIFIED MAREK'S DISEASE **VACCINE**

Abstract: Source: US4673572A The invention relates to a highly immunogenic virus preparation derived by attenuation employing serial passages in avian cell cultures and six plaque purification steps from a Marek's disease virus strain, belonging to Avian **Herpesvirus** serotype-1. The original virus strain MDV CVI-988 was recovered from a healthy chicken (Avian Diseases 16: 108-125, 1972). The live purified Marek's disease **vaccine** so obtained is innocuous for specific pathogen free Rhode Island Red chickens which are highly susceptible for development of Marek's disease tumors. The monovalent virus preparation, according to the invention, demonstrated in comparison with Marek's disease **vaccines** based on the same strain, currently in use at a lower cell passage level, an improved protective efficacy against challenge infection by two representatives of virulent Marek's disease virus. The monovalent virus preparation, according to the invention, provided significantly better protection than current MDV CVI-988 **vaccine** to challenge infection with a representative of the group of newly emerging very virulent strains of Marek's disease virus, MDV RB/1B. The monovalent virus preparation, according to the invention, provided significantly better protection than is HVT FC126 **vaccine** to challenge infection with another representative of the group of very virulent MD viruses, MDV Tun.

Classifications:

International (IPC 8-9): A61K39/255 A61P31/12 C12N7/00 C12N7/08 (Advanced/Invention);

C12N7/00 C12R1/91 C12R1/92 (Advanced/Non-invention); A61K39/245 A61P31/00 C12N7/00 C12N7/04 (Core/Invention)

International (IPC 1-7): A61K23/00 A61K39/12 A61K39/255 A61K39/42 C12K5/00 C12L9/00 C12N7/00 C12N7/08 C12R1/91

CPC: Y105424/816 A61K2039/5254 A61K2039/552 C12N2710/16334 A61K39/255 A61K39/12

European: A61K39/255

US: 424/229.1 424/816 424/89 435/237

Title: RECOMBINANT HERPESVIRUS OF TURKEYS AND USES THEREOF

Abstract: The present invention provides a recombinant **herpesvirus** of turkeys comprising a foreign gene inserted within the genomic DNA of **herpesvirus** of turkeys, wherein the foreign gene is inserted into the unique StuI site in the US2 gene coding region of the **herpesvirus** of turkeys genomic DNA and is capable of being expressed in a host cell infected with **herpesvirus** of turkeys. In one embodiment of the invention, said foreign gene encodes a polypeptide which is antigenic in an animal into which the recombinant **herpesvirus** of turkeys is introduced. The present invention also relates to the following recombinant **herpesvirus** of turkeys constructs and **vaccines** containing the same: S-HVT-012, S-HVT-045, S-HVT-046, S-HVT-047, S-HVT-062, S-HVT-048, S-HVT-049, S-HVT-050, S-HVT-106, S-HVT-051, S-HVT-052, S-HVT-066 and S-HVT-096.

Classifications:

International (IPC 8-9): A61K39/00 A61K39/17 A61K39/255 A61K39/265 A61K39/295
A61P31/12 A61P31/22 C07K14/03 C07K14/055 C07K14/08 C07K14/125 C07K14/165
C12N15/09 C12N15/86 C12N15/869 C12N5/10 C12N7/00

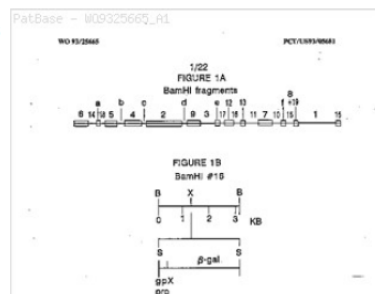
C12N7/01 (Advanced/Invention);

A61K39/00 (Advanced/Non-invention);
A61K39/00 (Core/Non-invention)

International (IPC 1-7): A61K39/12 A61K39/295 C12N1/20 C12N15/00 C12N15/86 C12N5/10 C12N7/00 C12N7/01

CPC: A61K39/00 C07K14/005 C12N15/86 C12N2710/16322 C12N2710/16343 C12N2760/18122 C12N2770/20022

European: C07K14/005 C12N15/86 K61K39/00 M12N710/16322 M12N710/16343
M12N760/18122 M12N770/20022



Title: VIRAL VECTOR SYSTEM FOR THE INTRODUCTION OF FOREIGN DNA EXPRESSION PRODUCTS INTO GALLINACEOUS BIRDS

Abstract: Viral vectors capable of delivering and expressing foreign DNA in gallinaceous birds are disclosed. These viral vectors also protect the birds against Marek's disease. Specifically, a **herpesvirus** of turkeys (HVT) vector is disclosed. Forwards and Backwards methods for the creation of these viral vectors are also disclosed.

Classifications:

International (IPC 8-9): C12N15/09 C12N15/869 (Advanced/Invention);

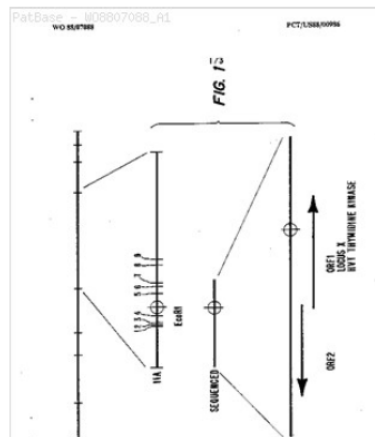
C12N15/09 (Advanced/Non-invention);

C12N15/09 C12N15/869 (Core/Invention)

International (IPC 1-7): A61K35/76 A61K39/255 C07H21/04 C12N15/00 C12N15/38
C12N15/54 C12N15/86

CPC: C12N15/86 C12N15/86

European: C12N15/86 M12N710/1



Title: Attenuated **herpesviruses**, **herpesviruses** which include foreign DNA encoding an amino acid sequence and **vaccines** containing same.

Abstract: Source: EP0658623A2 The present invention discloses an infectious bovine rhinotracheitis (IBR) virus which includes a foreign DNA sequence which encodes the *Escherichia coli* beta-galactosidase and neomycin resistance genes, and the parainfluenza-3, PI-3, virus hemagglutinin gene, HN, and a **herpesvirus** of turkeys which includes a foreign DNA sequence which encodes the *Escherichia coli* beta-galactosidase gene and the infectious bursal disease virus (IBDV) large segment of RNA.

Classifications:

International (IPC 8-9): A61K39/245 C07K14/00 C07K14/015 C07K14/03 C07K14/055 C07K14/115 C07K14/125 C07K14/14 C07K14/165 C07K14/17 C07K14/18 C07K14/44 C07K14/445 C07K19/00 C12N15/09 C12N15/62 C12N15/869 C12N7/00 C12P21/02 (Advanced/Invention):

A61K39/00 C12R1/92 (Advanced/M

International (IPC 1-7): A61K39/15 A61K39/155 A61K39/215 A61K39/245 C12N15/00

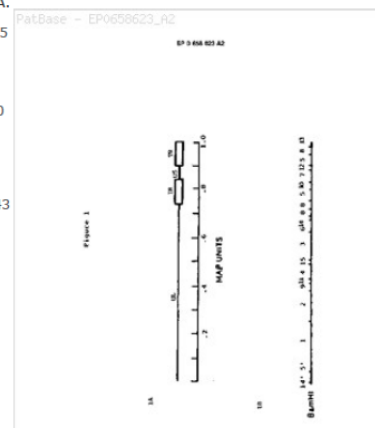
CPC: C12N15/86 A61K39/00 C07K14/005 C07K14/445 C07K2319/00 C07K2319/02

C07K2319/40 C12N15/62 C12N2710/16322 C12N2710/16722 C12N2710/16743
C12N2720/18222 C12N2750/11222 C12N2760/10122 C12N2760/10622

C12N2/20/12322 C12N2/50/14322 C12N2/60/18122 C12N2/60/18622
C13N3770/20022 C13N3770/24322

European: C07K14/005 C07K14/4

M12N710/16322 M12N710/16722 M12N710/16743
M12N720/12322 M12N750/14322 M12N760/18122 M12N760/18622 M12N770/20022
M12N770/24322



9) Family number: 12265260 (US5187087A)

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Title: RECOMBINANT **HERPESVIRUS** OF TURKEYS AND LIVE VECTOR **VACCINES** DERIVED THEREOF

Abstract: Source: US5187087A The present invention is concerned with a recombinant **Herpesvirus** of Turkeys (HVT), containing a heterologous gene incorporated into an insertion-region of the genome of HVT. The invention also relates to a vector **vaccine** comprising such a recombinant HVT which expresses a heterologous antigenic polypeptide and induces an adequate immune response on infection of an appropriate host animal.

Classifications:

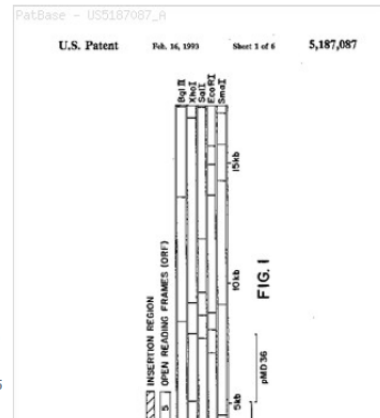
International (IPC 8-9): A61K38/00 A61K39/00 A61K39/17 A61K39/215 A61K39/245 A61K39/255 A61K39/395 A61K39/42 A61P31/12 C07K14/00 C07K14/005 C07K14/03 C07K14/055 C07K19/00 C12N1/21 C12N15/02 C12N15/09 C12N15/33 C12N15/38 C12N15/86 C12N15/869 C12N5/10 C12N7/00 C12P21/08 C12Q1/68 G01N33/53 G01N33/569 G01N33/577 G01N33/68 (Advanced/Invention); A61K38/00 A61K39/00 A61K39/215 A61K39/245 C12R1/19 C12R1/91 (Advanced/Non-invention); A61K38/00 A61K39/155 A61K39/215 A61K39/245 A61K39/395 A61P31/00 C07K14/00 C07K14/005 C07K19/00 C12N1/21 C12N15/02 C12N15/09 C12N15/33 C12N15/86 C12N15/869 C12N5/10 C12N7/00 C12P21/08 C12Q1/68 G01N33/53 G01N33/569 G01N33/577 G01N33/68 (Core/Invention); A61K39/00 (Core/Non-invention)

International (IPC 1-7): A61K31/70 A61K31/715 A61K37/02 A61K38/00 A61K39/17 A61K39/215 A61K39/245 A61K39/395 A61K39/42 C07H15/12 C07H21/04 C07K13/00 C07K14/005 C07K15/12 C07K19/00 C12N1/21 C12N15/00 C12N15/09 C12N15/33 C12N15/38 C12N15/45 C12N15/70 C12N15/86 C12N5/00 C12N5/10 C12N7/01 C12N7/04 C12P21/08 C12Q1/68 C12R1/19 C12R1/91 G01N33/53 G01N33/569 G01N33/577 G01N33/68

CPC: Y105424/816 C12N15/86 A61K39/00 C07K14/005 C12N2710/16322 C12N2710/16343

European: C07K14/005 C07K14/055 C12N15/86 C12N15/869 K61K39/00 M07K207/00 M12N710/16322 M12N710/16343

US: 424/199.1 424/204.1 424/211.1 424/214.1 424/222.1 424/229.1 424/816 424/85.8 424/88 435/172.1 435/172.3 435/235.1 435/240.2 435/320.1 435/349 435/463 435/465 536/23.72



Title: NEWCASTLE DISEASE VIRUS COMBINATION **VACCINE**

Abstract: Source: US5733556A The present invention provides a combination **vaccine** for use in the protection of poultry against ND comprising an expression system, such as a virus vector, expressing a NDV immunogenic protein, and a live NDV **vaccine** strain. It is demonstrated that such a combination **vaccine** affords good local and systemic protection.

Classifications:

International (IPC 8-9): A61K39/17 A61K48/00 A61P31/12 A61P31/14 C07K14/03 C07K14/125 C12N15/09 C12N15/45 C12P7/04 G01N33/569 (Advanced/Invention);

A61K39/00 (Advanced/Non-invention);

A61K39/155 A61K48/00 A61P31/00 C07K14/005 C12N15/09 C12N15/40 C12P7/02 G01N33/569 (Core/Invention);

A61K39/00 (Core/Non-invention)

International (IPC 1-7): A61K39/12 A61K39/17 C07K14/125 C12N15/00 C12N15/09 C12N15/45 C12N7/00 C12P7/04 G01N33/569

CPC: Y10S424/816 C07K14/005 A61K39/00 A61K39/17 C07K2319/00 C12N2710/14143 C12N2710/16322 C12N2760/18122 C12N2760/18134 A61K2039/5254 A61K2039/5256 A61K2039/541 A61K2039/543 A61K2039/552 C12N2710/16334 C12N2710/16343 C12N2710/24043 A61K39/12

European: A61K39/17 C07K14/005 K61K39/00 M07K207/00 M07K319/00 M12N710/14143 M12N710/16322 M12N760/18122 M12N760/18134

US: 424/186.1 424/199.1 424/204.1 424/214.1 424/229.1 424/232.1 424/816 435/235.1 435/320.1

PatBase - JP9169652-02		全身保護		局所保護	
接 種 物	投与の2または3週間	後のNDV Herts 35/56		投与の2または3週間	
	後のNDV Herts 35/56	後のNDV Besedeticに		に対する保護 (%)	
	に対する保護 (%)				
	2	5	2	5	
NDV - C 2株	73	13	27	13	
HVT - NDV / F株	ND	29	ND	20	
NDV - C2 + HVT - NDV / F 併用	ND	87	ND	75	
なし (SPFニワトリ)	0	0	0	0	
ND = 未測定					