



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
claims 1-20 relating to inventions 1
6 and 7 (all partially and insofar as applicable)
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,X	MOSCATELLO D K ET AL: "A NATURALLY OCCURRING MUTANT HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR AS A TARGET FOR PEPTIDE VACCINE IMMUNOTHERAPY OF TUMORS" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 57, 1997, pages 1419-1424, XP000882864 ISSN: 0008-5472	1-6,9-20	C07K14/52 A61K39/00 A61K38/19
Y	* abstract *	7	
X	WO 00/53219 A (MADSEN JOHN ; ENTREMED INC (US); HOLADAY JOHN W (US); RUIZ ANTONIO (US) 14 September 2000 (2000-09-14) * abstract; example 15; sequence 3 *	1-20	
X	US 6 224 868 B1 (WONG ALBERT J ET AL) 1 May 2001 (2001-05-01) * the whole document *	1-6,9-20	
A	ZHANG H -T ET AL: "The 121 amino acid isoform of vascular endothelial growth factor is more strongly tumorigenic than other splice variants in vivo" BRITISH JOURNAL OF CANCER, vol. 83, no. 1, July 2000 (2000-07), pages 63-68, XP002303713 ISSN: 0007-0920 * abstract *		TECHNICAL FIELDS SEARCHED (Int.Cl.7) C07K A61K
----- -/--			
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner Wiame, I
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04004) 3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,X	JACKSON D G ET AL: "MULTIPLE VARIANTS OF THE HUMAN LYMPHOCYTE HOMING RECEPTOR CD44 GENERATED BY INSERTIONS AT A SINGLE SITE IN THE EXTRACELLULAR DOMAIN" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 267, no. 7, 5 March 1992 (1992-03-05), pages 4732-4739, XP002063387 ISSN: 0021-9258 * the whole document *	1,3-7, 9-20	
X	WO 95/04547 A (ADOLF GUENTHER ; PATZELT ERIK (AT); HEIDER KARL HEINZ (DE); KERNFORSCH) 16 February 1995 (1995-02-16) * abstract; claims 3,22 *	1-3,5-7, 9-20	
D,X	DALL P ET AL: "Surface protein expression and messenger RNA-splicing analysis of CD44 in uterine cervical cancer and normal cervical epithelium." CANCER RESEARCH. 1 JUL 1994, vol. 54, no. 13, 1 July 1994 (1994-07-01), pages 3337-3341, XP002315458 ISSN: 0008-5472 * abstract *	1-7,9, 10,16,20	
D,X	ERMAK G ET AL: "RESTRICTED PATTERNS OF CD44 VARIANT EXON EXPRESSION IN HUMAN PAPILLARY THYROID CARCINOMA" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 56, no. 1, 1 March 1996 (1996-03-01), pages 1037-1042, XP002063388 ISSN: 0008-5472 * abstract *	1,3-7,9, 10,16,20	
----- -/--			
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner Wiame, I
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPO FORM 1503 03.92 (P/4C04)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,X	YOSHIDA K ET AL: "Abnormal retention of intron 9 in CD44 gene transcripts in human gastrointestinal tumors." CANCER RESEARCH. 1 OCT 1995, vol. 55, no. 19, 1 October 1995 (1995-10-01), pages 4273-4277, XP002315459 ISSN: 0008-5472 * abstract *	1,3-7,9, 10,16,20	
D,X	WOERNER S M ET AL: "Expression of CD44 splice variants in normal, dysplastic, and neoplastic cervical epithelium." CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. OCT 1995, vol. 1, no. 10, October 1995 (1995-10), pages 1125-1132, XP002315460 ISSN: 1078-0432 * abstract *	1,3-7,9, 10,16,20	
D,X	SEITER S ET AL: "Expression of CD44 variant isoforms in malignant melanoma." CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. MAR 1996, vol. 2, no. 3, March 1996 (1996-03), pages 447-456, XP002315461 ISSN: 1078-0432 * abstract *	1,3-7,9, 10,16,20	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
<p>The supplementary search report has been based on the last set of claims valid and available at the start of the search.</p>			
Place of search		Date of completion of the search	Examiner
The Hague		28 January 2005	Wiame, I
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04C04)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,Y	CASTLES C G ET AL: "Expression of a constitutively active estrogen receptor variant in the estrogen receptor-negative BT-20 human breast cancer cell line." CANCER RESEARCH. 15 DEC 1993, vol. 53, no. 24, 15 December 1993 (1993-12-15), pages 5934-5939, XP002315462 ISSN: 0008-5472 * abstract *	7	
D,Y	LEYGUE E ET AL: "Prevalence of estrogen receptor variant messenger RNAs in human breast cancer." CANCER RESEARCH. 1 OCT 1996, vol. 56, no. 19, 1 October 1996 (1996-10-01), pages 4324-4327, XP002315463 ISSN: 0008-5472 * abstract; figure 1 *	7	
D,Y	CARRUBA G ET AL: "Estradiol inhibits growth of hormone-nonresponsive PC3 human prostate cancer cells." CANCER RESEARCH. 1 MAR 1994, vol. 54, no. 5, 1 March 1994 (1994-03-01), pages 1190-1193, XP002315464 ISSN: 0008-5472 * abstract *	7	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search: 28 January 2005	Examiner Wiame, I
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

3
EPO FORM 1503 03/82 (P04C04)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DI MODUGNO F ET AL: "MHC-peptide binding: dimers of cysteine-containing nonapeptides bind with high affinity to HLA-A2.1 class I molecules" JOURNAL OF IMMUNOTHERAPY, RAVEN PRESS, NEW YORK, NY, US, vol. 20, no. 6, 1997, pages 431-436, XPO02976492 ISSN: 1053-8550 * abstract *	5,9	
T	WO 2004/063217 A1 (SUGIYAMA HARUO 'JP!; CHUGAI PHARMACEUTICAL CO LTD 'JP!; SUMITOMO PHARM) 29 July 2004 (2004-07-29) * abstract *	5,9	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner Wiame, I
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

3

EPC FORM 1503 03/92 (P04C04)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

Invention 1: claims 1-20 (all partially and insofar as applicable)

peptide of SEQ ID NO:73 comprising an amino acid sequence unique to an alternative splice form produced from a VEGF gene, and uses thereof.

Inventions 2-19: claims 1-20 (all partially and insofar as applicable)

same as invention 1, but relating to:

- invention 2: VEGF peptide of SEQ ID NO:75
 - invention 3: VEGF peptide of SEQ ID NO:77
 - invention 4: VEGF peptide of SEQ ID NO:79
 - invention 5: VEGF peptide of SEQ ID NO:81
 - invention 6: peptides comprising an amino acid sequence unique to an alternative splice form produced from a CD44 gene
 - invention 7: peptides comprising an amino acid sequence unique to an alternative splice form produced from an estrogen receptor gene
 - invention 8: peptides comprising an amino acid sequence unique to an alternative splice form produced from a FHIT gene
 - invention 9: RAR-alpha peptide of SEQ ID NO:3
 - invention 10: IRAK peptide of SEQ ID NO:5
 - invention 11: BSDL peptide of SEQ ID NO:8
 - invention 12: HOXA9 peptide of SEQ ID NO:10
 - invention 13: FPGS peptide of SEQ ID NO:12
 - invention 14: BRCA2 peptide of SEQ ID NO:26
 - invention 15: NRSF peptide of SEQ ID NO:29
 - invention 16: BAX peptide of SEQ ID NO:35
 - invention 17: caspase-8 peptide of SEQ ID NO:36
 - invention 18: COL1A1 peptide of SEQ ID NO:38
 - invention 19: Bok peptide of SEQ ID NO:39
-

专利名称(译)	替代剪接形式的蛋白质作为多种治疗方式的基础		
公开(公告)号	EP1401472A4	公开(公告)日	2005-04-06
申请号	EP2002734555	申请日	2002-05-28
[标]申请(专利权)人(译)	托马斯杰弗逊大学		
申请(专利权)人(译)	托马斯杰弗逊大学		
当前申请(专利权)人(译)	托马斯杰弗逊大学		
[标]发明人	WONG ALBERT J		
发明人	WONG, ALBERT J.		
IPC分类号	G01N33/50 A61K9/127 A61K35/12 A61K35/74 A61K35/76 A61K36/06 A61K38/00 A61K39/00 A61K39/39 A61K39/395 A61K48/00 A61P3/00 A61P3/10 A61P5/14 A61P7/00 A61P9/00 A61P9/10 A61P15/00 A61P19/04 A61P19/08 A61P25/28 A61P25/32 A61P29/00 A61P35/00 A61P37/02 A61P37/08 C07K5/00 C07K5/10 C07K7/00 C07K7/06 C07K7/08 C07K14/47 C07K14/475 C07K14/52 C07K14/705 C07K14/82 C07K16/22 C07K19/00 C12N5/10 C12N15/09 C12P21/08 C12Q1/02 C12Q1/68 G01N33/15 G01N33/53 G01N33/566 A61K38/19		
CPC分类号	A61K38/00 A61P3/00 A61P15/00 A61P19/04 A61P19/08 A61P25/28 A61P25/32 A61P29/00 C07K14/52		
优先权	60/293791 2001-05-25 US		
其他公开文献	EP1401472A2		
外部链接	Espacenet		

摘要(译)

来自与疾病或生理状况有关的蛋白质的可变剪接形式的肽或抗体被用作治疗剂或预防剂。衍生自血管内皮生长因子(VEGF)蛋白质的可变剪接形式的肽和抗体在预防或延迟肿瘤发作和诱导肿瘤消退方面特别有用。