# FIRST AMENDMENT TO SECOND AMENDED AND RESTATED LICENSE AGREEMENT

THIS FIRST AMENDMENT TO SECOND AMENDED AND RESTATED LICENSE AGREEMENT (this "Amendment") is made as of September 26, 2017 (the "Amendment Effective Date") by and between Gilead Sciences, Inc., a Delaware, USA corporation having its principle place of business at 333 Lakeside Drive, Foster City, California 94404 ("Gilead") and Medicines Patent Pool, a non-profit foundation registered under the laws of Switzerland having a principal place of business at Rue de Varembé, 7, 1202 Geneva, Switzerland ("MPP"). Gilead and MPP are each referred to individually herein as a "Party" and collectively as the "Parties."

WHEREAS, Gilead and MPP entered into that certain Second Amended and Restated License Agreement effective as of June 10, 2015 (the "Agreement"), pursuant to which Gilead granted MPP certain licenses with respect to its proprietary pharmaceutical agents tenofovir alafenamide, tenofovir disoproxil fumurate, elvitegravir, and cobicistat for treatment of HIV and HBV in developing world countries; and

WHEREAS, Gilead and MPP wish to amend the Agreement to add certain licenses with respect to Gilead's proprietary pharmaceutical agent bictegravir for treatment of HIV in developing world countries, in accordance with the terms and conditions of this Amendment, all as more fully described below.

NOW, THEREFORE, Gilead and MPP agree as follows:

#### 1. Definitions.

- a. The definitions of the below terms are hereby deleted from Section 1 of the Agreement and replaced as follows:
  - "Active Pharmaceutical Ingredient" or "API" shall mean one or more of the following active pharmaceutical ingredients: tenofovir alafenamide ("TAF"); tenofovir disoproxil fumurate ("TDF"); elvitegravir ("EVG"); cobicistat ("COBI"); and bictegravir ("BIC").
  - "Combination Products" shall mean BIC Combination Products, COBI Combination Products, EVG Combination Products, TAF Combination Products, and the Quad Products.
  - "Patents" shall mean (a) the patents and patent applications set forth in Appendix 2 hereto and (b) any other patents or patent applications (and resulting patents therefrom) that are in the Territory and owned or controlled by Gilead and its Affiliates during the term of this Agreement, including to the extent falling within clause (b) of this definition (i) those patents and patent applications exclusively licensed by Gilead from Japan Tobacco pursuant to the Japan Tobacco Agreement and (ii) those patents and patent applications claiming improvements or modifications to the manufacture of API, in the case of each patent and patent application referenced in clauses (a) and (b) solely to the extent necessary for MPP

to grant sublicenses of the license rights granted in Article 2 hereof to Sublicensees under a Sublicense Agreement.

"Product" shall mean TAF Product, TAF Combination Product, TDF Product, TDF Combination Product, COBI Product, COBI Combination Product, EVG Product, EVG Combination Product, BIC Product, BIC Combination Product, and the Ouad Products.

"Territory" shall mean the TDF-TAF Territory, the COBI Territory, the EVG-Quad Territory, and the BIC Territory.

- b. The below terms are hereby added to Section 1 of the Agreement and are defined as follows:
  - "BIC Combination Product" shall mean a pharmaceutical product containing BIC in combination with any other active pharmaceutical ingredient other than TAF, TDF, EVG, or COBI (in each case subject to the restrictions set forth in Section 2.4(b)(iv)), including any co formulation, co-packaged product, bundled product, or other type of combination product.
  - "BIC Product" shall mean a formulated and finished pharmaceutical product containing BIC as its sole active pharmaceutical ingredient.
  - "BIC Territory" shall mean those countries listed on Appendix 7.
- c. All capitalized terms not otherwise defined in this Amendment shall have the meanings assigned to them in the Agreement.

#### 2. License Grants.

- a. For clarity, the licenses granted by Gilead to MPP in Section 2.2 of the Agreement with respect to API hereby include BIC, in addition to TAF, TDF, EVG, and COBI, pursuant to Section 1(a) of this Amendment.
- b. Section 2.2 of the Agreement is hereby deleted and replaced with the following:

### "2.2 API Licenses.

(a) For India. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a royalty-free, non-exclusive, non-transferable license under the Licensed Technology to (i) make API in India solely for the purposes of exercising the licenses described in this Section 2.2(a); (ii) offer for sale and sell such API to Licensed Product Suppliers in India, China and South Africa for use solely for purposes set forth in the Licensed Product Suppliers' direct or indirect license from Gilead as set forth in the definition of Licensed Product Suppliers; (iii) import Licensed API into India for purposes of exercising the licenses described in Section 2.3(a) or (iv) use API for internal use in the applicable Territory. MPP has the right to grant sublicenses under the foregoing license solely to Sublicensees located in India pursuant to the terms and conditions of the applicable Sublicense Agreement, and the sublicense rights granted to each such

Sublicensee in India shall be non-sublicensable by such Sublicensee except as expressly provided under the applicable Sublicense Agreement.

- (b) For China. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a royalty-free, non-exclusive, non-transferable license under the Patents to (i) make API in China solely for the purposes of exercising the licenses described in this Section 2.2(b); (ii) offer for sale and sell such API to Licensed Product Suppliers in India, China and South Africa for use solely for purposes set forth in the Licensed Product Suppliers' direct or indirect license from Gilead as set forth in the definition of Licensed Product Suppliers; (iii) import Licensed API into China for purposes of exercising the licenses described in Section 2.3(b) or (iv) use API for internal use in the applicable Territory. MPP has the right to grant sublicenses under the foregoing license solely to Sublicensees located in China pursuant to the terms and conditions of the applicable Sublicense Agreement, and the sublicense rights granted to each such Sublicensee in China shall be non-sublicensable by such Sublicensee except as expressly provided under the applicable Sublicense Agreement.
- (c) For South Africa. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a royalty-free, non-exclusive, non-transferable license under the Licensed Technology (i) make API in South Africa solely for the purposes of exercising the licenses described in this Section 2.2(c); (ii) offer for sale and sell such API to Licensed Product Suppliers in India, China and South Africa for use solely for purposes set forth in the Licensed Product Suppliers' direct or indirect license from Gilead as set forth in the definition of Licensed Product Suppliers; (iii) import Licensed API into South Africa for purposes of exercising the licenses described in Section 2.3(c) or (iv) use API for internal use in the applicable Territory. MPP has the right to grant sublicenses under the foregoing license solely to Sublicensees located in South Africa pursuant to the terms and conditions of the applicable Sublicense Agreement, and the sublicense rights granted to each such Sublicensee in South Africa shall be non-sublicensable by such Sublicensee except as expressly provided under the applicable Sublicense Agreement.
- (d) The licenses granted in this Section 2.2 does not include, expressly or by implication, a license under any Gilead intellectual property right to manufacture, sell or distribute any active pharmaceutical ingredient owned or controlled by Gilead other than TAF, TDF, EVG, COBI, and BIC."
- c. Section 2.3 of the Agreement is hereby deleted and replaced with the following:
  - "(a) To Sublicensees in India. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a non-exclusive, non-transferable license under the Licensed Technology solely to make Product in India and sell, have sold, offer for sale, export from India and import (i) TAF Product, TAF Combination Products, TDF Product and TDF Combination Products in the Field in the TDF-TAF Territory, (ii) COBI Product and COBI Combination Products in the COBI Territory, (iii) EVG Product, EVG Combination Products and the Quad Products in the Field in the EVG-Quad Territory, and (iv) BIC Product and BIC Combination Products in the BIC Territory; provided that in each case such

Products shall be made only from Licensed API. The licenses granted in this Section 2.3(a) do not include, expressly or by implication, a license under any Gilead intellectual property right to manufacture, sell or distribute any product containing active pharmaceutical ingredients owned or controlled by Gilead other than Products containing TAF, TDF, EVG, COBI, and BIC. The licenses granted under this Section 2.3(a) shall not extend to any active pharmaceutical ingredient included within a Product other than TAF, TDF, EVG, COBI, and BIC.

- To Sublicensees in China. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a non-exclusive, non-transferable license under the Patents solely to make Product in China and sell, have sold, offer for sale, export from China and import (i) TAF Product, TAF Combination Products, TDF Product and TDF Combination Products in the Field in the TDF-TAF Territory, and (ii) COBI Product and COBI Combination Products in the COBI Territory, (iii) EVG Product, EVG Combination Products and the Quad Products in the Field in the EVG-Quad Territory, and (iv) BIC Product and BIC Combination Products in the BIC Territory; provided that in each case such Products shall be made only from Licensed API. The licenses granted in this Section 2.3(b) do not include, expressly or by implication, a license under any Gilead intellectual property right to manufacture, sell or distribute any product containing active pharmaceutical ingredients owned or controlled by Gilead other than Products containing TAF, TDF, EVG, COBI, and BIC. The licenses granted under this Section 2.3(b) shall not extend to any active pharmaceutical ingredient included within a Product other than TAF, TDF, EVG, COBI, and BIC.
- To Sublicensees in South Africa. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MPP a non-exclusive, non-transferable license under the Licensed Technology solely to make Product in South Africa and sell, have sold, offer for sale, export from South Africa and import (i) TAF Product, TAF Combination Products, TDF Product and TDF Combination Products in the Field in the TDF-TAF Territory, (ii) COBI Product and COBI Combination Products in the COBI Territory, (iii) EVG Product, EVG Combination Products and the Ouad Products in the Field in the EVG-Ouad Territory, and (iv) BIC Product and BIC Combination Products in the BIC Territory; provided that in each case such Products shall be made only from Licensed API. The licenses granted in this Section 2.3(c) do not include, expressly or by implication, a license under any Gilead intellectual property right to manufacture, sell or distribute any product containing active pharmaceutical ingredients owned or controlled by Gilead other than Products containing TAF, TDF, EVG, COBI, and BIC. The licenses granted under this Section 2.3(c) shall not extend to any active pharmaceutical ingredient included within a Product other than TAF, TDF, EVG, COBI, and BIC.
- (d) MPP shall have the right to grant sublicenses under the foregoing license grant solely to Sublicensees pursuant to the terms and conditions of the applicable Sublicense Agreement, and the sublicense rights granted to each such Sublicensee shall be royalty bearing and non-sublicensable by such Sublicensee except as expressly provided under the applicable Sublicense Agreement."
- d. The following language is hereby added to the Agreement as Section 2.4(b)(iv):

"Each Sublicensee will be allowed to manufacture and sell BIC in combination with other active pharmaceutical ingredients in the BIC Territory, provided in each case (A) such Sublicensee has the legal right to manufacture and sell such other active pharmaceutical ingredients in the applicable country in the BIC Territory, and (B) such manufacture and sale is in accordance with the licenses granted in the Sublicense Agreement."

e. Section 2.4(e) of the Agreement is hereby deleted and replaced with the following:

"No Other Licenses. Except as expressly set forth in this Agreement, Gilead does not grant any license to MPP under any of its intellectual property rights (including, without limitation, patents or rights to any proprietary compounds or drug substances other than API)."

3. <u>BIC Sublicense Amendment</u>. The following language is hereby added to the Agreement as Section 2.1(f):

"MPP shall have the right to execute an amendment to a Sublicense Agreement with a Sublicensee, pursuant to which MPP shall grant such Sublicensee a sublicense under the rights granted to MPP with respect to BIC, BIC Product, and BIC Combination Products, according to the terms of the applicable form amendment attached hereto as Appendix 8 (each, a "Form BIC Sublicense Amendment", and once fully executed, a "BIC Sublicense Amendment"). The form amendments attached hereto as Appendix 8-A, Appendix 8-B, Appendix 8-C, and Appendix 8-D correspond to the Form Sublicense Agreements attached hereto as Appendix 6-A, Appendix 6-B, Appendix 6-C, and Appendix 6-D, respectively. Gilead will be a party to each BIC Sublicense Amendment. For clarity, unless and until a particular Sublicensee enters into a BIC Sublicense Amendment corresponding to such Sublicensee's Sublicense Agreement, such Sublicensee will have no rights or licenses with respect to BIC, BIC Product and/or BIC Combination Products. MPP will not modify the terms and conditions of such form amendments or BIC Sublicense Amendments without Gilead's written consent, and Gilead will have no obligation to enter into any BIC Sublicense Amendment that varies from the applicable form amendment. Gilead will have the right to provide copies of any BIC Sublicense Amendment to Japan Tobacco. All conditions and restrictions set forth in each BIC Sublicense Amendment shall apply to the license rights granted to MPP hereunder as if fully set forth herein, except as expressly provided for otherwise in this Agreement."

- 4. <u>Appendices</u>. Appendices 1, 2, 3, 4, and 5 of the Agreement are hereby deleted and replaced with the new Appendices 1, 2, 3, 4, and 5 attached to this Amendment, respectively. Appendices 7, 8-A, 8-B, 8-C, and 8-D attached to this Amendment are hereby added to the Agreement as Appendices 7, 8-A, 8-B, 8-C, and 8-D, respectively.
- 5. <u>Miscellaneous</u>. This Amendment embodies the entire understanding of the Parties with respect to the subject matter hereof and supersedes all previous communications, representations or understandings, and agreements, whether oral or written, between the Parties relating to the subject matter hereof. Except as expressly amended by this Amendment, the terms and conditions of the Agreement will remain in full force and effect. This Amendment shall be effective as of the Amendment Effective Date, and may not be modified except by written agreement between the Parties. This Amendment will be governed by and construed under the laws of England, without regard to its choice of law principles, and any dispute that arises hereunder shall be resolved by binding arbitration as set forth in Section 8.6 of the Agreement.

[signatures appear on the following page]

IN WITNESS WHEREOF, the Parties have executed this Amendment by their duly authorized representatives as of the Amendment Effective Date.

GILEAD SCIENCES, INC.

Jame:

Name: Clifford M. Samuel

Title: Senior Vice President,
Access Operations & Emerging Markets

MEDICINES PATENT POOL

Park

Ву:\_\_\_

Name:

Title: General

Medicines Patent Pool

Rue de Varembé 7 1202 Geneva Switzerland

### APPENDIX 1

## Countries in the TDF-TAF Territory

,	A C 1 ' 1	40	Comment of the commen	70	D N O
1.	Afghanistan		Georgia		Papua New Guinea
2.	Angola		Ghana		Philippines
3.	Anguilla		Grenada		Rwanda
4.	Antigua and Barbuda		Guatemala		Saint Kitts and Nevis
5.	Armenia		Guinea		Saint Lucia
6.	Aruba		Guinea-Bissau	84.	Saint Vincent & the
7.	Bahamas		Guyana		Grenadines
8.	Bangladesh		Haiti		Samoa
	Barbados		Honduras		São Tomé and Príncipe
	Belarus		India		Senegal
11.	Belize		Indonesia		Seychelles
	Benin		Jamaica		Sierra Leone
	Bhutan	52.	Kazakhstan	90.	Solomon Islands
14.	Bolivia	53.	Kenya	91.	Somalia
15.	Botswana	54.	Kiribati	92.	South Africa
16.	British Virgin Islands	55.	Kyrgyzstan	93.	South Sudan
17.	Burkina Faso	56.	Lao, People's Dem. Rep.	94.	Sri Lanka
18.	Burundi	57.	Lesotho	95.	Sudan
19.	Cambodia	58.	Liberia	96.	Surinam
20.	Cameroon	59.	Madagascar	97.	Swaziland
21.	Cape Verde	60.	Malawi	98.	Syrian Arab Republic
22.	Central African Republic	61.	Malaysia	99.	Tajikistan
23.	Chad	62.	Maldives	100	. Tanzania, U. Rep. of
24.	Comoros	63.	Mali	101	. Thailand
25.	Congo, Rep	64.	Mauritania	102	. Timor-Leste
26.	Congo, Dem. Rep. of the	65.	Mauritius	103	. Togo
27.	Côte d'Ivoire	66.	Moldova, Rep. of	104	
28.	Cuba	67.	Mongolia	105	. Trinidad and Tobago
29.	Djibouti	68.	Montserrat	106	. Turkmenistan
30.	Dominica	69.	Mozambique	107	. Turks and Caicos
31.	Dominican Republic		Myanmar	108	. Tuvalu
	Ecuador		Namibia	109	. Uganda
33.	El Salvador	72.	Nauru	110	
34.	Equatorial Guinea	73.	Nepal	111	. Uzbekistan
	Eritrea		Nicaragua	112	
36.	Ethiopia		Niger	113	. Vietnam
	Fiji Islands		Nigeria	114	. Yemen
	Gabon		Pakistan	115	. Zambia
	Gambia		Palau	116	
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# APPENDIX 2

Patents

### **TDF Patents**

### (221) Title: NUCLEOTIDE ANALOGS

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
China (People's Republic)	Granted	7/25/1997	200810083233.70	200810083233.70	12/12/2012
China (People's Republic)	Granted	7/25/1997	97197460.8	ZL97197460.8	4/30/2008
India	Pending	7/25/1997	2076/DEL/1997		

#### (230) Title: NUCLEOTIDE ANALOG COMPOSITION AND SYNTHESIS METHOD

SubCase	Status	Filing Date	Application No.	Patent No.	Issue Date
China (People's Republic)	Granted	7/23/1998	200510099916.80	ZL200510099916.8	9/24/2008
China (People's Republic)	Granted	7/23/1998	200410046290X	200410046290X	4/19/2006
India	Pending	7/24/1998	896/DEL/2002		
India	Pending	7/24/1998	963/DEL/2002		***************************************
India	Pending	7/24/1998	1362/DEL/2004		
India	Granted	7/24/1998	2174/DEL/1998	190780	3/15/2004
Indonesia	Granted	7/23/1998	W-991548	7658	4/11/2002

### (270) Title: COMPOSITIONS AND METHODS FOR COMBINATION ANTIVIRAL THERAPY

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
Armenia	Granted	1/13/2004	200501134	15145	6/13/2011
China (People's Republic)	Published	1/13/2004	201510697340.90		
China (People's Republic)	Granted	1/13/2004	201210094391.90	ZL201210094391.9	2/24/2016
China (People's Republic)	Granted	1/13/2004	200480002190.50	200480002190.50	6/6/2012
Eurasian Patent Organization	Published	1/13/2004	201100293		
Eurasian Patent Organization	Granted	1/13/2004	200501134	15145	6/13/2011
Kazakhstan	Granted	1/13/2004	200501134	15145	6/13/2011
Kazakhstan	Pending		200501134 (PTE Application)		

Kyrgyz Republic	Granted	1/13/2004	200501134	15145	6/13/2011
Kyrgyz Republic	Granted		200501134 (PTE Application)	15145	5/31/2012
Moldova	Granted	1/13/2004	200501134	15145	6/13/2011
Tajikistan	Granted	1/13/2004	200501134	15145	6/13/2011
Turkmenistan	Granted	1/13/2004	200501134	15145	6/13/2011
Turkmenistan	Pending		200501134 (PTE Application)		

#### (676) Title: METHOD AND COMPOSITION FOR PHARMACEUTICAL PRODUCT

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
China (People's Republic)	Granted	6/13/2006	200680026180.40	ZL200680026180.4	10/7/2015

# (677) Title: A PHARMACEUTICAL COMPOSITION, A METHOD OF PREPARING THEREOF, AND A METHOD OF TREATING VIRAL DISEASES USING SAID COMPOSITION

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
Armenia	Granted	6/13/2006	200800033	17764	3/29/2013
China (People's Republic)	Granted	6/13/2006	200680026866.30	200680026866.30	3/27/2013
Eurasian Patent Organization	Published	6/13/2006	201201265		
Eurasian Patent Organization	Granted	6/13/2006	200800033	17764	3/29/2013
India	Pending	6/13/2006	9661/DELNP/2007		
Kazakhstan	Granted	6/13/2006	200800033	17764	3/29/2013
Kyrgyz Republic	Granted	6/13/2006	200800033	17764	3/29/2013
Moldova	Granted	6/13/2006	200800033	17764	3/29/2013
South Africa	Granted	6/13/2006	2008/00297	2008/00297	4/28/2010
Tajikistan	Granted	6/13/2006	200800033	17764	3/29/2013
Turkmenistan	Granted	6/13/2006	200800033	17764	3/29/2013

#### TAF Patents

# (249) Title: PRODRUGS OF PHOSPHONATE NUCLEOTIDE ANALOGUES AND METHODS FOR SELECTING AND MAKING SAME

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Intellectual Property	Granted	1200300003	7/20/2001	12393	12/29/2003

Organization (OAPI)	**************************************				
African Regional	Granted	2003/002724	7/20/2001	AP 1466	9/22/2005
Industrial					
Property Organization					
Anguilla	Granted	AI/A/2015/00173	7/20/2001	AI/A/2015/00173	11/2/2015
China (People's	Granted	1813161.1	7/20/2001	ZL01813161.1	12/27/2006
Republic) China (People's	Granted	200410097845.30	7/20/2001	ZL200410097845.3	7/16/2008
Republic)					
Congo, Democratic	Granted	NP/002/EXT/2016	7/20/2001	2016/4386	11/11/2016
Republic of Ethiopia	Granted	ET/PI/15/184	7/20/2001	135	5/25/2016
Eurasian Patent	Granted	200300188	7/20/2001	4926	10/28/2004
Organization	Granica	200300100	772072001	4)20	10/20/2004
Falkland Islands (Malvinas)	Granted		7/20/2001	15365	8/25/2015
Fiji	Published	1214	7/20/2001		
Grenada	Granted	7 of 2015	7/20/2001	7 of 2015	10/6/2015
Guyana	Published	1641	7/20/2001		***************************************
Haiti	Pending		7/20/2001		
India	Granted	9/MUMNP/2003	7/20/2001	208435	7/27/2007
India	Granted	00529/MUMNP/2006	7/20/2001	241597	7/14/2010
Indonesia	Granted	W-00200602129	7/20/2001	IDP0022897	2/20/2009
Indonesia	Granted	W-00200804005	7/20/2001	IDP000040148	2/15/2016
Indonesia	Granted	W00200300261	7/20/2001	IDP0022911	2/20/2009
Jamaica	Pending	18/1/5695	7/20/2001		
Kiribati	Granted	14/15	7/20/2001	14/15	10/7/2015
Montserrat	Granted	1961695.2	7/20/2001	1301519	9/23/2015
Nepal	Pending	669	7/20/2001		
Seychelles	Granted	1301519	7/20/2001	1301519	5/25/2016
Sierra Leone	Pending	EP1301519	7/20/2001		
Solomon Islands	Granted	J37/371	7/20/2001	J37/371	3/3/2016
South Africa	Granted	2002/10271	7/20/2001	2002/10271	12/31/2003
Turks and	Pending	10213	7/20/2001		
Caicos Islands					
Tuvalu	Granted		2/25/2015	TVP1301519	1/6/2016
Vietnam	Granted	1-2002-01193	7/20/2001	8475	5/24/2010
Virgin Islands (British)	Granted	414/5/2015	7/20/2001	414/5/2015	12/1/2015

(872) Title: TENOFOVIR ALAFENAMIDE HEMIFUMARATE

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Intellectual Property Organization (OAPI)	Granted	1201400057	8/15/2012	17070	6/29/2015
African Regional Industrial Property Organization	Granted	AP/P/2014/007437	8/15/2012	3639	3/31/2016
Bahamas	Granted	2441	8/15/2012	2441	6/19/2014
Bolivia	Pending	SP-0277-2012	8/15/2012		
China (People's Republic)	Published	201280039891.00	8/15/2012	***************************************	
Ecuador	Pending	SP-14-13206-PCT	8/15/2012		
El Salvador	Pending	E-4659-2014	8/15/2012	cuca (cura an abha 0000000000000000000000000000000000	
Eurasian Patent Organization	Published	201490208	8/15/2012		
India	Pending	1012/DELNP/2014	8/15/2012		**************************************
Indonesia	Published	P00201400805	8/15/2012		
Moldova	Pending	A20140011	8/15/2012	***************************************	
Pakistan	Pending	539/2012	8/15/2012	******************	
Philippines	Granted	1-2014-500349	8/15/2012	1-2014- 500349	2/29/2016
South Africa	Allowed	2014/00582	8/15/2012		
Thailand	Pending	1401000784	8/15/2012		
Vietnam	Pending	1-2014-00440	8/15/2012	are remark above the remarks over the con-	***************************************

### (877) Title: METHODS FOR PREPARING ANTI-VIRAL NUCLEOTIDE ANALOGS

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Bahamas	Granted	2455	10/3/2012	2455	6/24/2014
Bolivia	Granted	SP-0352-2012	10/3/2012	6385-B	11/26/2014
China (People's Republic)	Published	201280048965.70	10/3/2012		
Ecuador	Published	IEPI-2014-74	10/3/2012	a.u	
El Salvador	Published	E-4696/2014	10/3/2012		
Eurasian Patent Organization	Allowed	201490753	10/3/2012		
India	Published	2953/DELNP/2014	10/3/2012	2.4444444444444444444444444444444444444	
Pakistan	Pending	671/2012	10/3/2012		

### **EVG Patents**

### (JF-0136) Title: COMPOUND AND METHOD OF USE

Country	Status App	lication No.	Filing	Patent No.	
			Date		

Bolivia	Pending	SP-230265	11/18/2003	Mile (60046644000000000000000000000000000000	Market :   Company of an India (Fig. and Continue) (Co. Ann
China (People's Republic)	Granted	200380100277.10	11/20/2003	ZL200380100277.1	3/19/2008
India	Granted	01316/CHENP/2004	11/20/2003	245833	2/3/2011
Indonesia	Granted	WO00200401542	11/20/2003	P0023507	6/1/2009
Nigeria	Granted	424/2003	11/19/2003	RP.15779	10/20/2004
Philippines	Granted	1-2004-500895	11/20/2003	1-2004-500895	8/20/2008
South Africa	Granted	2004/4537	11/20/2003	2004/4537	8/31/2005
Thailand	Pending	301004379	11/20/2003		
Vietnam	Granted	1-2004-00605	11/20/2003	1-0011884	10/7/2013
			********************************		

## (JF-0179) Title: CRYSTALLINE FORM

Country	Status	Application No.	Filing Date	Patent No.	
Bolivia	Pending	SP-250121	5/19/2005		
China (People's Republic)	Granted	200580016142.60	5/19/2005	ZL200580016142.6	5/26/2010
India	Pending	357/CHENP/2010	5/19/2005		
Philippines	Granted	1-2006-502297	5/19/2005	1-2006-502297	11/19/2010
South Africa	Granted	2006/10647	5/19/2005	2006/10647	6/25/2008
Thailand	Pending	100718	5/19/2005		

## (JF-0193) Title: MANUFACTURING PROCESS: ROUTE D AND F

Country	Status	Application No.:	Filing Date	Patent No.	Issue Date
China	Granted	200780016151.40	3/6/2007	200780016151.40	2/6/2013
India	Granted	5344/CHENP/2008	3/6/2007	258895	2/13/2014
India	Pending	532/CHENP/2014	3/6/2007		

### (JF-0192) Title: MANUFACTURING PROCESS: ROUTE C AND E

Country	Status	Application No.	Filing Date	Patent No:	Issue Date
African Regional Industrial Property Organization	Granted	AP/P/2008/004621	3/6/2007	2914	5/5/2014
China	Granted	200780016172.60	3/6/2007	ZL200780016172.60	5/29/2013
Eurasian Patent Organization	Granted	200870321	3/6/2007	17861	3/29/2013
Indonesia	Pending	W00200802860	3/6/2007	IDP0032077	10/22/2012
India	Granted	5341/CHENP/2008	3/6/2007	258747	2/4/2014
India	Pending	613/CHENP/2014	3/6/2007		

African Intellectual	Granted	1200800317	3/6/2007	14280	3/31/2009
Property					
Organization (OAPI)					
Vietnam	Granted	1-2008-02431	3/6/2007	14450	8/17/2015
South Africa	Granted	2008/07547	3/6/2007	2008/07547	11/25/2009

# (718) Title: METHODS OF IMPROVING THE PHARMACOKINETICS OF HIV INTEGRASE INHIBITORS

Country	Status	Application No.	Filing Date	Patent No.	
Armenia	Granted	200801619	12/29/2006	18544	8/30/2013
African Regional Industrial Property Organization	Granted	AP/P/2008/004522	12/29/2006	AP2702	7/31/2013
China (People's Republic)	Published	201410249622.80	12/29/2006		***************************************
Eurasian Patent Organization	Granted	200801619	12/29/2006	18544	8/30/2013
Eurasian Patent Organization	Published	201201496	12/29/2006	·	
Indonesia	Pending	W00201102461	12/29/2006		2
Indonesia	Published	W00 2008 02128	12/29/2006		
India	Pending	6748/DELNP/2015	12/29/2006		
India	Pending	5576/DELNP/2008	12/29/2006		
Kyrgyz Republic	Granted	200801619	12/29/2006	18544	8/30/2013
Moldova	Granted	200801619	12/29/2006	18544	8/30/2013
African Intellectual Property Organization (OAPI)	Granted	1200800239	12/29/2006	14320	6/30/2009
Tajikistan	Granted	200801619	12/29/2006	18544	8/30/2013
Turkmenistan	Granted	200801619	12/29/2006	18544	8/30/2013
Vietnam	Pending	1-2008-01921	12/29/2006		
South Africa	Granted	2008/06222	12/29/2006	2008/06222	3/25/2009

#### (720) Title: PROCESS AND INTERMEDIATES FOR PREPARING INTEGRASE INHIBITORS

Country	Status	Application No.	Filing Date	Patent Number	Issue Date
Armenia	Granted	200900441	9/11/2007	22099	11/30/2015
African Regional Industrial Property Organization	Granted	AP/P/2009/004831	9/11/2007	AP3004	10/16/2014
China	Granted	200780033907.60	9/11/2007	ZL200780033907.6	10/16/2013
China	Granted	201210224990.80	9/11/2007	CN102766098B	3/30/2016

China	Abandoned	201510922236.50	9/11/2007		
China	Published	201510922511.30	9/11/2007		
Eurasian Patent Organization	Granted	200900441	9/11/2007	22099	11/30/2015
Indonesia	Published	W00200900634	9/11/2007	***************************************	
Kyrgyz Republic	Granted	200900441	9/11/2007	22099	11/30/2015
Kazakhstan	Granted	200900441	9/11/2007	22099	11/30/2015
Moldova	Granted	200900441	9/11/2007	22099	11/30/2015
African Intellectual Property Organization (OAPI)	Granted	1200900070	9/11/2007	14458	9/30/2009
Thailand	Published	701004583	9/11/2007		
Tajikistan	Granted	200900441	9/11/2007	22099	11/30/2015
Turkmenistan	Granted	200900441	9/11/2007	22099	11/30/2015
Vietnam	Granted	1-2009-00636	9/11/2007	11932	10/22/2013
Vietnam	Granted	1-2012-01354	9/11/2007	14698	10/20/2015
South Africa	Granted	2009/01576	9/11/2007	2009/01576	2/24/2010

### (746) Title: PROCESS AND INTERMEDIATES FOR PREPARING INTEGRASE INHIBITORS

Country	Status	Application No	Filing Date	Patent Number	Issue Date
African Regional Industrial Property Organization	Granted	AP/P/2010/005187	9/11/2008	AP 2785	10/31/2013
China	Granted	200880106554.20	9/11/2008	ZL200880106554.2	7/9/2014
Eurasian Patent Organization	Granted	201070256	9/11/2008	19431	3/31/2014
Ecuador	Inactive	SP-10-10081	9/11/2008		
Indonesia	Published	W00201000759	9/11/2008		
India	Pending	1615/DELNP/2010	9/11/2008	- 35 Physical Branch (1997)	ee amerija V
African Intellectual Property Organization (OAPI)	Granted	1201000093	9/11/2008	15058	
Thailand	Published	801004676	9/11/2008		
Vietnam	Granted	1-2010-00483	9/11/2008	10866	11/20/2012
South Africa	Granted	2010/02066	9/11/2008	2010/02066	12/29/2010

## (903) Title: PROCESS AND INTERMEDIATES FOR PREPARING INTEGRASE INHIBITORS

Country	Status	Application No.	Filing Date	Patent No.	
China (People's Republic)	Granted	201380041287.60	8/1/2013	ZL201380041287.6	11/2/2016
Eurasian Patent Organization	Allowed	201590018	8/1/2013		
India	Pending	1688/DELNP/2015	8/1/2013		

### **COBI** Patents

## (692) Title: MODULATORS OF PHARMACOKINETIC PROPERTIES OF THERAPEUTICS

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1200800450	9/30/2009	14409
African Regional Industrial Property Organization	Granted	AP/P/2008/004720	9/30/2014	AP2985
Anguilla	Granted	AI/A/2015/00172	11/2/2015	AI/A/2015/00172
Armenia	Granted	200900155	11/28/2014	20489
China (People's Republic)	Granted	200780025607.30	5/29/2013	ZL200780025607.3
China (People's Republic)	Granted	201310141408.60	4/29/2015	ZL201310141408.6
Congo, Democratic Republic of	Pending	NP/004/EXT/2016		
Ethiopia	Granted	ET/PI/15/185	5/25/2016	134
<b>Eurasian Patent Organization</b>	Allowed	201270738		
Eurasian Patent Organization	Granted	200900155	11/28/2014	20489
Fiji	Published	1217		
Guyana	Published	1642		
Haiti	Pending			
India	Pending	10487/DELNP/2008		
Indonesia	Granted	W00200900061	8/12/2016	IDP00042227
Jamaica	Pending	18/1/5696		
Kazakhstan	Granted	200900155	11/28/2014	20489
Kiribati	Granted	13/15	10/7/2015	13/15
Kyrgyz Republic	Granted	200900155	11/28/2014	20489
Moldova	Granted	200900155	11/28/2014	20489
Montserrat	Granted		9/23/2015	3 of 2015
Nauru	Pending		·	
Nepal	Pending	894		
Seychelles	Granted	2049506	5/25/2016	2049506
Sierra Leone	Pending	EP2049506		
Solomon Islands	Granted	J37/370	2/10/2016	J37/370
South Africa	Pending	2008/10399		

Granted	200900155	11/28/2014	20489
Published	701003404		
Granted	200900155	11/28/2014	20489
Pending	10214	WALK RECORDER TO THE RECORD RE	
Granted		11/7/2015	TVP2049506
Unfiled			
Pending	1-2009-00240		
Pending	1-2012-02702		
Granted	415/6/2015	12/1/2015	415/6/2015
	Published Granted Pending Granted Unfiled Pending Pending	Published 701003404  Granted 200900155  Pending 10214  Granted  Unfiled  Pending 1-2009-00240  Pending 1-2012-02702	Published 701003404  Granted 200900155 11/28/2014  Pending 10214  Granted 11/7/2015  Unfiled  Pending 1-2009-00240  Pending 1-2012-02702

### (719) Title: MODULATORS OF PHARMACOKINETIC PROPERTIES OF THERAPEUTICS

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1200900273	6/30/2010	14749
African Regional Industrial Property Organization	Granted	AP/P/2009/004964	9/16/2014	AP2986
African Regional Industrial Property Organization	Granted	AP/P/2013/007042	11/30/2016	AP3915
Armenia	Granted	200901155	7/30/2014	19893
China (People's Republic)	Granted	201310326757.50	6/10/2015	10326757
China (People's Republic)	Granted	200880013255.40	8/28/2013	ZL200880013255.4
Eurasian Patent Organization	Granted	200901155	7/30/2014	19893
Fiji	Granted			
Indonesia	Granted	W00200902299	3/18/2015	IDP000038076
Kazakhstan	Granted	200901155	7/30/2014	19893
Kyrgyz Republic	Granted	200901155	7/30/2014	19893
Moldova	Granted	200901155	7/30/2014	19893
South Africa	Pending	2009/05882		
South Africa	Unfiled			
Tajikistan	Granted	200901155	7/30/2014	19893
Thailand	Pending	801000867		
Turkmenistan	Granted	200901155	7/30/2014	19893
Vietnam	Pending	1-2009-01990		: . ,
Vietnam	Pending	1-2012-02696		

# (757) Title: THE USE OF SOLID CARRIER PARTICLES TO IMPROVE THE PROCESSABILITY OF A PHARMACEUTICAL AGENT

Country	Status	Application No.	Filing	Patent No.
			Date	

African Intellectual Property Organization (OAPI)	Granted	1201000364	9/28/2012	15589
African Regional Industrial Property Organization	Granted	AP/P/2010/005429	1/30/2015	3209
Armenia	Granted	201071173	3/31/2016	22950
Belarus	Granted	201071173	3/31/2016	22950
China (People's Republic)	Published	201510408376.00		
China (People's Republic)	Published	201310447258.10		
Ecuador	Pending	SP-10-10636		
Eurasian Patent Organization	Published	201591353		
Eurasian Patent Organization	Granted	201071173	3/31/2016	22950
India	Pending	7565/DELNP/2010		
Indonesia	Published	W00201004105		***************************************
Kazakhstan	Granted	201071173	3/31/2016	22950
Kyrgyz Republic	Granted	201071173	3/31/2016	22950
Moldova	Granted	201071173	3/31/2016	22950
South Africa	Granted	2010/08007	10/26/2011	2010/08007
Tajikistan	Granted	201071173	3/31/2016	22950
Turkmenistan	Granted	201071173	3/31/2016	22950
Vietnam	Pending	1-2010-02929		**************************************

# (775) Title: METHOD OF PREPARING AN INHIBITOR OF CYTOCHROME P450 MONOOXYGENASE, AND INTERMEDIATES INVOLVED

Country	Status	Application No.	Filing Date	Patent No.
African Regional Industrial Property Organization	Granted	AP/P/2011/005864	and the second	
African Intellectual Property Organization (OAPI)	Granted	1201100311.00	4/1/2010	15801
Bolivia	Published	SP-0082-2010	4/1/2010	
China	Granted	201080014307.70	4/1/2010	ZL201080014307.7
China	Published	201510160505.90	4/1/2010	
Eurasian Patent Organization	Granted	201190179.00	4/1/2010	22739
Eurasian Patent Organization	Published	201590979.00	4/1/2010	- Al A
Ecuador	Pending	SP-11-11391	4/1/2010	
Indonesia	Granted	W00201103554	4/1/2010	IDP000041448
India	Pending	7323/DELNP/2011	4/1/2010	
Pakistan	Pending	262/2010	3/31/2010	
Thailand	Published	1101002473.00	4/1/2010	***************************************
Vietnam	Pending	1-2011-02324	4/1/2010	
South Africa	Granted	2011/07430	4/1/2010	2011/07430

### (783) Title: TABLETS FOR COMBINATION THERAPY

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Pending	1201100281		
African Regional Industrial Property Organization	Granted	AP/P/2011/05857	5/6/2015	AP3250
Armenia	Granted	201190125	5/29/2015	21313
Azerbaijan	Granted	201190125	5/29/2015	21313
Bolivia	Pending	SP-00292010		
China (People's Republic)	Granted	201080006646.00	9/11/2013	ZL201080006646.0
Ecuador	Pending	SP-11-11307	· · · · · · · · · · · · · · · · · · ·	
Eurasian Patent Organization	Published	201491658		
Eurasian Patent Organization	Granted	201190125	5/29/2015	21313
India	Pending	5823/DELNP/2011		
Indonesia	Granted	W00201103098	3/30/2016	IDP000040606
Kazakhstan	Granted	201190125	5/29/2015	21313
Kyrgyz Republic	Granted	201190125	5/29/2015	21313
Moldova	Granted	201190125	5/29/2015	21313
Pakistan	Allowed	94/2010		
Singapore	Published	2014007744		
South Africa	Granted	2011/06154	5/28/2014	2011/06154
Tajikistan	Granted	201190125	5/29/2015	21313
Thailand	Published	1101001423		
Turkmenistan	Granted	201190125	5/29/2015	21313
Vietnam	Pending	1-2011-02035		

# (895) Title: METHODS AND INTERMEDIATES FOR PREPARING PHARMACEUTICAL AGENTS

Country	Status	Application No.	Filing Date	Patent No.
China	Abandoned	201380007712.X		
India	Abandoned	6192/DELNP/2014	,	

#### **BIC Patents**

# (1007) TITLE: POLYCYCLIC-CARBAMOYLPYRIDONE COMPOUNDS AND THEIR PHARMACEUTICAL USE

Country	Status	Application No.	Filing	Patent No.	Issue
			Date		Date

African Intellectual Property Organization (OAPI)	Pending	1201500240	12/19/2013		
African Regional Industrial Property Organization	Pending	AP/P/2015/008510	12/19/2013		
Anguilla	Pending	AI/A/2016/00180	12/19/2013		
Bahamas	Pending	2551	12/19/2013		
Bolivia	Published	SP-00412-2013	12/20/2013		
China	Published	201380073134.X	12/19/2013		······································
Congo, Democratic Republic of	Pending		12/19/2013		
Ecuador	Published	IEPI-2015-31224	12/19/2013		
El Salvador	Published	E-5002-2015	12/19/2013	i 9	
Ethiopia	Pending	ET/PI/16/204	12/19/2013		
Eurasian Patent Organization	Published	201591027	12/19/2013		*
Fiji	Published	1229	12/19/2013		
Grenada	Granted		12/19/2013	2 T	7/19/2016
Guyana	Pending	1656	12/19/2013	F-25 - 12 - 1	
Haiti	Pending		12/19/2013		
India	Pending	5535/DELNP/2015	12/19/2013		
Indonesia	Allowed	P00201503852	12/19/2013		
Indonesia	Pending	P00201607128	12/19/2013		
Jamaica	Pending	18/1/5740	12/19/2013		
Kiribati	Granted		12/19/2013	-	9/20/2016
Moldova	Pending	a20150064	12/19/2013		
Montserrat	Granted	***************************************	12/19/2013	4 OF 2016	5/27/2016
Nepal	Pending	4	12/19/2013		
Pakistan	Pending	908/2013	12/20/2013		
Philippines	Published	1-2015-501445	12/19/2013		
Philippines	Pending	1-2016-500389	12/19/2013	-	
Seychelles	Pending	2822954	12/19/2013		
Sierra Leone	Pending		12/19/2013		***************************************
Solomon Islands	Granted		12/19/2013	J37/379	8/5/2016
South Africa	Pending	2015/04914	12/19/2013		
South Africa	Pending	2015/07997	12/19/2013		
South Korea	Pending	10-2015-7019194	12/19/2013	······································	
Thailand	Pending	1501003563	12/19/2013		
Turks and Caicos Islands	Granted	10226	12/19/2013	10226	9/7/2016
Tuvalu	Granted	TVP2822954	12/19/2013	TVP2822954	8/15/2016
Vietnam	Granted	1-2015-02321	12/19/2013	15503	5/16/2016

Vietnam	Pending	1-2015-04199	12/19/2013		
Virgin Islands (British)	Granted	EP2822954	12/19/2013	427/5/2016	9/21/2016

# (1091) Title: SODIUM (2R,5S,13AR)-7,9-DIOXO-10-((2,4,6-TRIFLUOROBENZYL)CARBAMOYL)-2,3,4,5,7,9,13,13A-OCTAHYDRO-2,5-METHANOPYRIDO[1',2':4,5]PYRAZINO[2,1-B]OXAZEPIN-8-OLATE

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Regional Industrial Property Organization	Pending	AP/P/2016/009591	6/19/2015	27	
African Intellectual Property Organization (OAPI)	Pending	1201600454	6/19/2015		
Bolivia	Published	SP 126-2015	6/19/2015		
Bahamas	Allowed	2701	6/18/2015		
China	Published	201580033152.40	6/19/2015		
Cuba	Pending	2016-0187	6/19/2015		
Dominican Republic	Published	P2016-0327	6/19/2015		***************************************
Eurasian Patent Organization	Pending	201692414	6/19/2015		
Ecuador	Published	IEPI-2016-95566	6/19/2015		
El Salvador	Pending	2016005339	6/19/2015	***************************************	
Guatemala	Pending	A2016-000262	6/19/2015		
Indonesia	Unfiled				
India	Pending	201617042937.00	6/19/2015		
Nigeria	Pending	NG/PT/C/2016/2106	6/19/2015		
Philippines	Pending				
Pakistan	Pending	382/2015	6/18/2015		
Thailand	Pending			***************************************	***************************************
Trinidad and Tobago	Pending	TT/A/2016/00132	6/19/2015		
Vietnam	Pending				ne waarnaar noomuudddyk hynodysuu saaan uchomo
South Africa	Pending	2016/08744	6/19/2015		

# (1147) Title: THERAPEUTIC COMPOSITIONS FOR TREATMENT OF HUMAN IMMUNODEFICIENCY VIRUS

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Bangladesh	Pending	272/2016	11/2/2016	* 11 49 - 1	30X 304 30X 30X 30X 30X
Bolivia	Pending	SP-0260-2016	11/9/2016		**************************************
Bahamas	Pending		11/8/2016		***************************************
Pakistan	Pending	696/2016	11/9/2016		

Patent Cooperation Treaty	Entered NP	US2016/060989	11/8/2016
A CONTRACTOR OF THE CONTRACTOR			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

### (1062) Title: SYNTHESIS OF POLYCYCLIC-CARBAMOYLPYRIDONE COMPOUNDS

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Bahamas	Allowed	2702	6/18/2015		
China	Pending	201580033052.10	6/16/2015	***************************************	
Eurasian Patent Organization	Pending	201692412	6/16/2015		
India	Pending	201717000457.00	6/16/2015		
Patent Cooperation Treaty	Entered NP	US2015/036017	6/16/2015		

#### **TDF-Quad Patents**

#### (221) Title: NUCLEOTIDE ANALOGS

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
China (People's Republic)	Granted	7/25/1997	200810083233.70	200810083233.70	12/12/2012
China (People's Republic)	Granted	7/25/1997	97197460.8	ZL97197460.8	4/30/2008
India	Pending	7/25/1997	2076/DEL/1997		

#### (230) Title: NUCLEOTIDE ANALOG COMPOSITION AND SYNTHESIS METHOD

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
China (People's Republic)	Granted	7/23/1998	200510099916.80	ZL200510099916.8	9/24/2008
China (People's Republic)	Granted	7/23/1998	200410046290X	200410046290X	4/19/2006
India	Pending	7/24/1998	896/DEL/2002		
India	Pending	7/24/1998	963/DEL/2002		
India	Pending	7/24/1998	1362/DEL/2004		
India	Granted	7/24/1998	2174/DEL/1998	190780	3/15/2004
Indonesia	Granted	7/23/1998	W-991548	7658	4/11/2002

(692) Title: DIAMINOALKANE COMPOUNDS (VARIANTS) AND A METHOD OF PREPARING THEREOF (VARIANTS), A PHARMACEUTICAL COMPOSITION AND A THERAPEUTIC AGENT FOR INHIBITING CYTOCHROME-P450-MONOOXYGENASE, METHODS FOR TREATING AN HIV INFECTION AND VIRAL HEPATITS C, A METHOD OF MOD

Country	Status	Application No.	Filing Date	Patent No. Issue Dat
African Intellectual Property Organization (OAPI)	Granted	1200800450	9/30/2009	14409
African Regional Industrial Property Organization	Granted	AP/P/2008/004720	9/30/2014	AP2985
Anguilla	Granted	AI/A/2015/00172	11/2/2015	AI/A/2015/00172
Armenia	Granted	200900155	11/28/2014	20489
China (People's Republic)	Granted	200780025607.30	5/29/2013	ZL200780025607.3
China (People's Republic)	Granted	201310141408.60	4/29/2015	ZL201310141408.6
Congo, Democratic Republic of	Pending	NP/004/EXT/2016		
Ethiopia	Granted	ET/PI/15/185	5/25/2016	134
Eurasian Patent Organization	Allowed	201270738		
Eurasian Patent Organization	Granted	200900155	11/28/2014	20489
Fiji	Published	1217		
Guyana	Published	1642		
Haiti	Pending			
India	Pending	10487/DELNP/2008		
Indonesia	Granted	W00200900061	8/12/2016	IDP00042227
Jamaica	Pending	18/1/5696	***************************************	
Kazakhstan	Unfiled			
Kazakhstan	Granted	200900155	11/28/2014	20489
Kiribati	Granted	13/15	10/7/2015	13/15
Kyrgyz Republic	Granted	200900155	11/28/2014	20489
Moldova	Granted	200900155	11/28/2014	20489
Montserrat	Granted		9/23/2015	3 of 2015
Nauru	Pending			
Nepal	Pending	894		
Seychelles	Granted	2049506	5/25/2016	2049506
Sierra Leone	Pending	EP2049506	***************************************	
Solomon Islands	Granted	J37/370	2/10/2016	J37/370
South Africa	Pending	2008/10399	***************************************	
Tajikistan	Granted	200900155	11/28/2014	20489
Thailand	Published	701003404		

Turkmenistan	Granted	200900155	11/28/2014	20489
Turks and Caicos Islands	Pending	10214		
Tuvalu	Granted	The second secon	11/7/2015	TVP2049506
Vietnam	Pending	1-2009-00240	**************************************	
Vietnam	Pending	1-2012-02702		
Virgin Islands (British)	Granted	415/6/2015	12/1/2015	415/6/2015

## (719) Title: MODULATORS OF PHARMACOKINETIC PROPERTIES OF THERAPEUTICS

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1200900273	6/30/2010	14749
African Regional Industrial Property Organization	Granted	AP/P/2009/004964	9/16/2014	AP2986
African Regional Industrial Property Organization	Granted	AP/P/2013/007042	11/30/2016	AP3915
Armenia	Granted	200901155	7/30/2014	19893
China (People's Republic)	Granted	201310326757.50	6/10/2015	10326757
China (People's Republic)	Granted	200880013255.40	8/28/2013	ZL200880013255.4
Eurasian Patent Organization	Granted	200901155	7/30/2014	19893
Fiji	Granted			
Indonesia	Granted	W00200902299	3/18/2015	IDP000038076
Kazakhstan	Granted	200901155	7/30/2014	19893
Kyrgyz Republic	Granted	200901155	7/30/2014	19893
Moldova	Granted	200901155	7/30/2014	19893
South Africa	Pending	2009/05882	***************************************	
South Africa	Unfiled			
Tajikistan	Granted	200901155	7/30/2014	19893
Thailand	Pending	801000867	······································	
Turkmenistan	Granted	200901155	7/30/2014	19893
Vietnam	Pending	1-2009-01990		
Vietnam	Pending	1-2012-02696		

# (757) Title: THE USE OF SOLID CARRIER PARTICLES TO IMPROVE THE PROCESSABILITY OF A PHARMACEUTICAL AGENT

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1201000364	9/28/2012	15589

African Regional Industrial Property Organization	Granted	AP/P/2010/005429	1/30/2015	3209
Armenia	Granted	201071173	3/31/2016	22950
Belarus	Granted	201071173	3/31/2016	22950
China (People's Republic)	Published	201510408376.00		······································
China (People's Republic)	Published	201310447258.10		
Ecuador	Pending	SP-10-10636		
Eurasian Patent Organization	Published	201591353		***************************************
Eurasian Patent Organization	Granted	201071173	3/31/2016	22950
India	Pending	7565/DELNP/2010		anne a santa de la companyora de la comp
Indonesia	Published	W00201004105		
Kazakhstan	Granted	201071173	3/31/2016	22950
Kyrgyz Republic	Granted	201071173	3/31/2016	22950
Moldova	Granted	201071173	3/31/2016	22950
South Africa	Granted	2010/08007	10/26/2011	2010/08007
Tajikistan	Granted	201071173	3/31/2016	22950
Turkmenistan	Granted	201071173	3/31/2016	22950
Vietnam	Pending	1-2010-02929	***************************************	

# (775) Title: METHOD OF PREPARING AN INHIBITOR OF CYTOCHROME P450 MONOOXYGENASE, AND INTERMEDIATES INVOLVED

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1201100311.00	4/1/2010	15801
Bolivia	Abandoned	11-114.749	4/1/2010	
China	Granted	201080014307.70	4/1/2010	ZL201080014307.7
China	Published	201510160505.90	4/1/2010	
Eurasian Patent Organization	Granted	201190179.00	4/1/2010	22739
Eurasian Patent Organization	Published	201590979.00	4/1/2010	
Ecuador	Pending	SP-11-11391	4/1/2010	
Indonesia	Granted	W00201103554	4/1/2010	IDP000041448
India	Pending	7323/DELNP/2011	4/1/2010	· · · · · · · · · · · · · · · · · · ·
Pakistan	Pending	262/2010	3/31/2010	
Thailand	Published	1101002473.00	4/1/2010	
Vietnam	Pending	1-2011-02324	4/1/2010	
South Africa	Granted	2011/07430	4/1/2010	2011/07430

# (895) Title: METHODS AND INTERMEDIATES FOR PREPARING PHARMACEUTICAL AGENTS

Country	Status	Application No.	Filing Date	Patent No.
China	Abandoned	201380007712.X		
India	Abandoned	6192/DELNP/2014		

# (EMU-108) Title: Antiviral Activity and Resolution of 2-Hydroxymethyl-5-(5-Fluorocytosin-1-yl)-1,3-Oxathiolane

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Philippines	Granted	1-1992-43955	2/20/92	1-1992-43955	2/20/09
Philippines	Granted	55191	12/27/96	1-1996-55191	3/9/07
Philippines	Granted	55192	2/20/92	55192	12/19/08
Philippines	Granted	55193	2/20/92	55193	12/19/08
Philippines	Granted	55194	2/20/92	55194	12/19/08

#### (EMU-4000) Title: 1,3-Oxathiolane Nucleoside Analogues

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Botswana	Granted	BW/A/1998/00163	4/27/98	BW/P/2002/00042	5/22/03
Domincan Republic	Granted	1793970004607.00	7/10/97	370	7/10/17
Honduras	Granted	PICA97118	8/18/97	3775	4/25/00
Jamaica	Granted	697267	7/8/97	3615	5/25/05
Nicaragua	Granted	97.0096	12/5/97	1134RPI	5/17/99

#### (TRI1010) Non-Homogenous Systems for the Resolution of Enantiomeric Mixtures

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China	Granted	99811893.1	8-Oct-99	ZL99811893.1	28-Nov-07

#### (TRI1020) Method of Manufacture of 1,3-Oxathiolane Nucleosides

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China	Granted	99809992.9	12-Aug-99	ZL99809992.9	10-Mar-04

#### (783) Title: TABLETS FOR COMBINATION THERAPY

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual	Pending	1201100281		
Property Organization	_			
(OAPI)			0. y = 0.00 0.00 0.00 0.00 0.00 0.00 0.0	

African Regional Industrial Property Organization	Granted	AP/P/2011/05857	5/6/2015	AP3250
Armenia	Granted	201190125	5/29/2015	21313
Azerbaijan	Granted	201190125	5/29/2015	21313
Bolivia	Pending	SP-00292010		And the second s
China (People's Republic)	Granted	201080006646.00	9/11/2013	ZL201080006646.0
Ecuador	Pending	SP-11-11307		
Eurasian Patent Organization	Published	201491658		
Eurasian Patent Organization	Granted	201190125	5/29/2015	21313
India	Pending	5823/DELNP/2011	······································	
Indonesia	Granted	W00201103098	3/30/2016	IDP000040606
Kazakhstan	Granted	201190125	5/29/2015	21313
Kyrgyz Republic	Granted	201190125	5/29/2015	21313
Moldova	Granted	201190125	5/29/2015	21313
Pakistan	Allowed	94/2010		
Singapore	Published	2014007744		
South Africa	Granted	2011/06154	5/28/2014	2011/06154
Tajikistan	Granted	201190125	5/29/2015	21313
Thailand	Published	1101001423		
Turkmenistan	Granted	201190125	5/29/2015	21313
Vietnam	Pending	1-2011-02035		

### TAF-Quad Patents

# (249) Title: PRODRUGS OF PHOSPHONATE NUCLEOTIDE ANALOGUES AND METHODS FOR SELECTING AND MAKING SAME

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Intellectual Property Organization (OAPI)	Granted	1200300003	7/20/2001	12393	12/29/2003
African Regional Industrial Property Organization	Granted	2003/002724	7/20/2001	AP 1466	9/22/2005
Anguilla	Granted	AI/A/2015/00173	7/20/2001	AI/A/2015/00173	11/2/2015
China (People's Republic)	Granted	1813161.1	7/20/2001	ZL01813161.1	12/27/2006
China (People's Republic)	Granted	200410097845.30	7/20/2001	ZL200410097845.3	7/16/2008

Congo, Granted Democratic Republic of		NP/002/EXT/2016	7/20/2001	2016/4386	11/11/2016
Ethiopia	Granted	ET/PI/15/184	7/20/2001	135	5/25/2016
Eurasian Patent Organization	Granted	200300188	7/20/2001	4926	10/28/2004
Falkland Islands (Malvinas)	Granted		7/20/2001	15365	8/25/2015
Fiji	Published	1214	7/20/2001		
Grenada	Granted	7 of 2015	7/20/2001	7 of 2015	10/6/2015
Guyana	Published	1641	7/20/2001	Market War ( ) (Market Color) - Market des colors and color des colors c	
Haiti	Pending		7/20/2001		
India	Granted	9/MUMNP/2003	7/20/2001	208435	7/27/2007
India	Granted	00529/MUMNP/2006	7/20/2001	241597	7/14/2010
Indonesia	Granted	W-00200602129	7/20/2001	IDP0022897	2/20/2009
Indonesia	Granted	W-00200804005	7/20/2001	IDP000040148	2/15/2016
Indonesia	Granted	W00200300261	7/20/2001	IDP0022911	2/20/2009
Jamaica	Pending	18/1/5695	7/20/2001		
Kiribati	Granted	14/15	7/20/2001	14/15	10/7/2015
Montserrat	Granted	1961695.2	7/20/2001	1301519	9/23/2015
Nepal	Pending	669	7/20/2001		01990, 100 erresensagan essex anesticarrisen erresentition son an
Seychelles	Granted	1301519	7/20/2001	1301519	5/25/2016
Sierra Leone	Pending	EP1301519	7/20/2001	apini, inini, manamananani, ilik ina mira at matalahan merupakan menggaran menggaran	
Solomon Islands	Granted	J37/371	7/20/2001	J37/371	3/3/2016
South Africa	Granted	2002/10271	7/20/2001	2002/10271	12/31/2003
Turks and Caicos Islands	Pending	10213	7/20/2001		
Tuvalu	Granted		2/25/2015	TVP1301519	1/6/2016
Vietnam	Granted	1-2002-01193	7/20/2001	8475	5/24/2010
Virgin Islands (British)	Granted	414/5/2015	7/20/2001	414/5/2015	12/1/2015

## (872) Title: TENOFOVIR ALAFENAMIDE HEMIFUMARATE

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Intellectual Property Organization (OAPI)	Granted	1201400057	8/15/2012	17070	6/29/2015
African Regional Industrial Property Organization	Granted	AP/P/2014/007437	8/15/2012	3639	3/31/2016
Bahamas	Granted	2441	8/15/2012	2441	6/19/2014
Bolivia	Pending	SP-0277-2012	8/15/2012		
China (People's Republic)	Published	201280039891.00	8/15/2012	***************************************	<del></del>

Pending	SP-14-13206-PCT	8/15/2012		
Pending	E-4659-2014	8/15/2012		CONTRACTOR
Published	201490208	8/15/2012	***************************************	
Pending	1012/DELNP/2014	8/15/2012		
Published	P00201400805	8/15/2012		S. W. Communication of States and
Pending	A20140011	8/15/2012		
Pending	539/2012	8/15/2012		
Granted	1-2014-500349	8/15/2012	1-2014- 500349	2/29/2016
Allowed	2014/00582	8/15/2012		
Pending	1401000784	8/15/2012	***************************************	
Pending	1-2014-00440	8/15/2012		
	Pending Published Pending Published Pending Pending Granted Allowed Pending	Pending E-4659-2014 Published 201490208  Pending 1012/DELNP/2014 Published P00201400805 Pending A20140011 Pending 539/2012 Granted 1-2014-500349  Allowed 2014/00582 Pending 1401000784	Pending         E-4659-2014         8/15/2012           Published         201490208         8/15/2012           Pending         1012/DELNP/2014         8/15/2012           Published         P00201400805         8/15/2012           Pending         A20140011         8/15/2012           Pending         539/2012         8/15/2012           Granted         1-2014-500349         8/15/2012           Allowed         2014/00582         8/15/2012           Pending         1401000784         8/15/2012	Pending         E-4659-2014         8/15/2012           Published         201490208         8/15/2012           Pending         1012/DELNP/2014         8/15/2012           Published         P00201400805         8/15/2012           Pending         A20140011         8/15/2012           Pending         539/2012         8/15/2012           Granted         1-2014-500349         8/15/2012           Allowed         2014/00582         8/15/2012           Pending         1401000784         8/15/2012

#### (877) Title: METHODS FOR PREPARING ANTI-VIRAL NUCLEOTIDE ANALOGS

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Bahamas	Granted	2455	10/3/2012	2455	6/24/2014
Bolivia	Granted	SP-0352-2012	10/3/2012	6385-B	11/26/2014
China (People's Republic)	Published	201280048965.70	10/3/2012	······································	
Ecuador	Published	IEPI-2014-74	10/3/2012		
El Salvador	Published	E-4696/2014	10/3/2012	**************************************	
Eurasian Patent Organization	Allowed	201490753	10/3/2012		
India	Published	2953/DELNP/2014	10/3/2012	***************************************	
Pakistan	Pending	671/2012	10/3/2012		

(692) Title: DIAMINOALKANE COMPOUNDS (VARIANTS) AND A METHOD OF PREPARING THEREOF (VARIANTS), A PHARMACEUTICAL COMPOSITION AND A THERAPEUTIC AGENT FOR INHIBITING CYTOCHROME-P450-MONOOXYGENASE, METHODS FOR TREATING AN HIV INFECTION AND VIRAL HEPATITS C, A METHOD OF MOD

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
African Intellectual Property Organization (OAPI)	Granted	1200800450	9/30/2009	14409	
African Regional Industrial Property Organization	Granted	AP/P/2008/004720	9/30/2014	AP2985	
Anguilla	Granted	AI/A/2015/00172	11/2/2015	AI/A/2015/00172	

Armenia	Granted	200900155	11/28/2014	20489
China (People's Republic)	Granted	200780025607.30	5/29/2013	ZL200780025607.3
China (People's Republic)	Granted	201310141408.60	4/29/2015	ZL201310141408.6
Congo, Democratic Republic of	Pending	NP/004/EXT/2016		
Ethiopia	Granted	ET/PI/15/185	5/25/2016	134
Eurasian Patent Organization	Allowed	201270738		
Eurasian Patent Organization	Granted	200900155	11/28/2014	20489
Fiji	Published	1217		
Guyana	Published	1642		
Haiti	Pending	war ge sajat sajat		
India	Pending	10487/DELNP/2008		
Indonesia	Granted	W00200900061	8/12/2016	IDP00042227
Jamaica	Pending	18/1/5696		
Kazakhstan	Unfiled			
Kazakhstan	Granted	200900155	11/28/2014	20489
Kiribati	Granted	13/15	10/7/2015	13/15
Kyrgyz Republic	Granted	200900155	11/28/2014	20489
Moldova	Granted	200900155	11/28/2014	20489
Montserrat	Granted	:	9/23/2015	3 of 2015
Nauru	Pending			THE RESIDENCE OF THE PROPERTY OF THE PARTY O
Nepal	Pending	894		
Seychelles	Granted	2049506	5/25/2016	2049506
Sierra Leone	Pending	EP2049506	***************************************	
Solomon Islands	Granted	J37/370	2/10/2016	J37/370
South Africa	Pending	2008/10399		
Tajikistan	Granted	200900155	11/28/2014	20489
Thailand	Published	701003404	~ ~ ~ <del>~ ***</del>	
Turkmenistan	Granted	200900155	11/28/2014	20489
Turks and Caicos Islands	Pending	10214		
Tuvalu	Granted		11/7/2015	TVP2049506
Vietnam	Pending	1-2009-00240		
Vietnam	Pending	1-2012-02702	,	At A Market Company
Virgin Islands (British)	Granted	415/6/2015	12/1/2015	415/6/2015

(719) Title: MODULATORS OF PHARMACOKINETIC PROPERTIES OF THERAPEUTICS

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1200900273	6/30/2010	14749
African Regional Industrial Property Organization	Granted	AP/P/2009/004964	9/16/2014	AP2986
African Regional Industrial Property Organization	Granted	AP/P/2013/007042	11/30/2016	AP3915
Armenia	Granted	200901155	7/30/2014	19893
China (People's Republic)	Granted	201310326757.50	6/10/2015	10326757
China (People's Republic)	Granted	200880013255.40	8/28/2013	ZL200880013255.4
Eurasian Patent Organization	Granted	200901155	7/30/2014	19893
Fiji	Granted			
Indonesia	Granted	W00200902299	3/18/2015	IDP000038076
Kazakhstan	Granted	200901155	7/30/2014	19893
Kyrgyz Republic	Granted	200901155	7/30/2014	19893
Moldova	Granted	200901155	7/30/2014	19893
South Africa	Pending	2009/05882		
South Africa	Unfiled			
Tajikistan	Granted	200901155	7/30/2014	19893
Thailand	Pending	801000867		the state of the s
Turkmenistan	Granted	200901155	7/30/2014	19893
Vietnam	Pending	1-2009-01990	**************************************	
Vietnam	Pending	1-2012-02696		······································

# (757) Title: THE USE OF SOLID CARRIER PARTICLES TO IMPROVE THE PROCESSABILITY OF A PHARMACEUTICAL AGENT

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1201000364	9/28/2012	15589
African Regional Industrial Property Organization	Granted	AP/P/2010/005429	1/30/2015	3209
Armenia	Granted	201071173	3/31/2016	22950
Belarus	Granted	201071173	3/31/2016	22950
China (People's Republic)	Published	201510408376.00		
China (People's Republic)	Published	201310447258.10	***************************************	
Ecuador	Pending	SP-10-10636		
Eurasian Patent Organization	Published	201591353	***************************************	·
Eurasian Patent Organization	Granted	201071173	3/31/2016	22950
India	Pending	7565/DELNP/2010		
Indonesia	Published	W00201004105		

Kazakhstan	Granted	201071173	3/31/2016	22950
Kyrgyz Republic	Granted	201071173	3/31/2016	22950
Moldova	Granted	201071173	3/31/2016	22950
South Africa	Granted	2010/08007	10/26/2011	2010/08007
Tajikistan	Granted	201071173	3/31/2016	22950
Turkmenistan	Granted	201071173	3/31/2016	22950
Vietnam	Pending	1-2010-02929		

# (775) Title: METHOD OF PREPARING AN INHIBITOR OF CYTOCHROME P450 MONOOXYGENASE, AND INTERMEDIATES INVOLVED

Country	Status	Application No.	Filing Date	Patent No.
African Intellectual Property Organization (OAPI)	Granted	1201100311.00	4/1/2010	15801
Bolivia	Abandoned	11-114.749	4/1/2010	
China	Granted	201080014307.70	4/1/2010	ZL201080014307.7
China	Published	201510160505.90	4/1/2010	
Eurasian Patent Organization	Granted	201190179.00	4/1/2010	22739
Eurasian Patent Organization	Published	201590979.00	4/1/2010	
Ecuador	Pending	SP-11-11391	4/1/2010	
Indonesia	Granted	W00201103554	4/1/2010	IDP000041448
India	Pending	7323/DELNP/2011	4/1/2010	
Pakistan	Pending	262/2010	3/31/2010	
Thailand	Published	1101002473.00	4/1/2010	
Vietnam	Pending	1-2011-02324	4/1/2010	
South Africa	Granted	2011/07430	4/1/2010	2011/07430

# (895) Title: METHODS AND INTERMEDIATES FOR PREPARING PHARMACEUTICAL AGENTS

Country	Status	Application No. Filing Date Patent No.
China	Abandoned	201380007712.X
India	Abandoned	6192/DELNP/2014

### (899) Title: THERAPEUTIC COMPOUNDS

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China (People's Republic)	Published	201380007670.X	2/1/2013		

Eurasian Patent	Published	201491287	2/1/2013
Organization			
India	Pending	7100/DELNP/2014	2/1/2013

# (EMU-108) Title: Antiviral Activity and Resolution of 2-Hydroxymethyl-5-(5-Fluorocytosin-1-yl)-1,3-Oxathiolane

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Philippines	Granted	1-1992-43955	2/20/92	1-1992-43955	2/20/09
Philippines	Granted	55191	12/27/96	1-1996-55191	3/9/07
Philippines	Granted	55192	2/20/92	55192	12/19/08
Philippines	Granted	55193	2/20/92	55193	12/19/08
Philippines	Granted	55194	2/20/92	55194	12/19/08

#### (EMU-4000) Title: 1,3-Oxathiolane Nucleoside Analogues

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Botswana	Granted	BW/A/1998/00163	4/27/98	BW/P/2002/00042	5/22/03
Domincan Republic	Granted	1793970004607.00	7/10/97	370	7/10/17
Honduras	Granted	PICA97118	8/18/97	3775	4/25/00
Jamaica	Granted	697267	7/8/97	3615	5/25/05
Nicaragua	Granted	97.0096	12/5/97	1134RPI	5/17/99

### (TRI1010) Non-Homogenous Systems for the Resolution of Enantiomeric Mixtures

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China	Granted	99811893.1	8-Oct-99	ZL99811893.1	28-Nov-07

#### (TRI1020) Method of Manufacture of 1,3-Oxathiolane Nucleosides

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China	Granted	99809992.9	12-Aug-99	ZL99809992.9	10-Mar-04

For purposes of this Appendix 2, references to "PCT,"OAPI," "EAPO" and "ARIPO" shall not be construed or interpreted to grant rights to Licensee in any country other than those countries expressly included within the licenses granted to Licensee in Sections 2.2 and 2.3 of this Agreement.

# **APPENDIX 3**Emtricitabine Patents

# (EMU-108) Title: Antiviral Activity and Resolution of 2-Hydroxymethyl-5-(5-Fluorocytosin-1-yl)-1,3-Oxathiolane

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Philippines	Granted	1-1992-43955	2/20/92	1-1992-43955	2/20/09
Philippines	Granted	55191	12/27/96	1-1996-55191	3/9/07
Philippines	Granted	55192	2/20/92	55192	12/19/08
Philippines	Granted	55193	2/20/92	55193	12/19/08
Philippines	Granted	55194	2/20/92	55194	12/19/08

#### (EMU-4000) Title: 1,3-Oxathiolane Nucleoside Analogues

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
Botswana	Granted	BW/A/1998/00163	4/27/98	BW/P/2002/00042	5/22/03
Dominican Republic	Granted	1793970004607.00	7/10/97	370	7/10/17
Honduras	Granted	PICA97118	8/18/97	3775	4/25/00
Jamaica	Granted	697267	7/8/97	3615	5/25/05
Nicaragua	Granted	97.0096	12/5/97	1134RPI	5/17/99

#### (TRI1010) Non-Homogenous Systems for the Resolution of Enantiomeric Mixtures

Country	Status	Application No.	Filing Date		Issue Date
China	Granted	99811893.1	8-Oct-99	ZL99811893.1	11/28/07

#### (TRI1020) Method of Manufacture of 1,3-Oxathiolane Nucleosides

Country	Status	Application No.	Filing Date	Patent No.	Issue Date
China	Granted	99809992.9	12-Aug-99	ZL99809992.9	3/10/04

### (270) Title: COMPOSITIONS AND METHODS FOR COMBINATION ANTIVIRAL THERAPY

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
Armenia	Granted	1/13/2004	200501134	15145	6/13/2011
China (People's Republic)	Published	1/13/2004	201510697340.90		
China (People's Republic)	Granted	1/13/2004	201210094391.90	ZL201210094391.9	2/24/2016
China (People's Republic)	Granted	1/13/2004	200480002190.50	200480002190.50	6/6/2012
Eurasian Patent Organization	Published	1/13/2004	201100293		

Eurasian Patent Organization	Granted	1/13/2004	200501134	15145	6/13/2011
Kazakhstan	Granted	1/13/2004	200501134	15145	6/13/2011
Kazakhstan	Pending		200501134 (PTE Application)		
Kyrgyz Republic	Granted	1/13/2004	200501134	15145	6/13/2011
Kyrgyz Republic	Granted		200501134 (PTE Application)	15145	5/31/2012
Moldova	Granted	1/13/2004	200501134	15145	6/13/2011
Tajikistan	Granted	1/13/2004	200501134	15145	6/13/2011
Turkmenistan	Granted	1/13/2004	200501134	15145	6/13/2011
Turkmenistan	Pending		200501134 (PTE Application)		

# (677) Title: A PHARMACEUTICAL COMPOSITION, A METHOD OF PREPARING THEREOF, AND A METHOD OF TREATING VIRAL DISEASES USING SAID COMPOSITION

Country	Status	Filing Date	Application No.	Patent No.	Issue Date
Armenia	Granted	6/13/2006	200800033	17764	3/29/2013
China (People's Republic)	Granted	6/13/2006	200680026866.30	200680026866.30	3/27/2013
Eurasian Patent Organization	Published	6/13/2006	201201265		
Eurasian Patent Organization	Granted	6/13/2006	200800033	17764	3/29/2013
India	Pending	6/13/2006	9661/DELNP/2007		
Kazakhstan	Granted	6/13/2006	200800033	17764	3/29/2013
Kyrgyz Republic	Granted	6/13/2006	200800033	17764	3/29/2013
Moldova	Granted	6/13/2006	200800033	17764	3/29/2013
South Africa	Granted	6/13/2006	2008/00297	2008/00297	4/28/2010
Tajikistan	Granted	6/13/2006	200800033	17764	3/29/2013
Turkmenistan	Granted	6/13/2006	200800033	17764	3/29/2013

### **APPENDIX 4**

## Countries in the COBI Territory

					_	
1.	Afghanistan		Georgia			oua New Guinea
2.	Angola		Ghana			lippines
3.	Anguilla		Grenada			anda
4.	Antigua and Barbuda		Guatemala			nt Kitts and Nevis
5.	Armenia		Guinea	83.	Sain	nt Lucia
6.	Aruba	45.	Guinea-Bissau	84.	Sain	nt Vincent & the
7.	Bahamas	46.	Guyana		Gre	enadines
8.	Bangladesh	47.	Haiti	85.	San	noa
9.	Barbados	48.	Honduras	86.	São	Tomé and Príncipe
10.	Belarus	49.	India	87.	Sen	iegal
11.	Belize	50.	Indonesia	88.	Sey	chelles
12.	Benin	51.	Jamaica	89.	Sie	rra Leone
13.	Bhutan	52.	Kazakhstan	90.	Sol	omon Islands
14.	Bolivia	53.	Kenya	91.	Son	nalia
15.	Botswana	54.	Kiribati	92.	Sou	th Africa
16.	British Virgin Islands	55.	Kyrgyzstan	93.	Sou	ith Sudan
	Burkina Faso		Lao, People's Dem. Rep.	94.	Sri	Lanka
18.	Burundi		Lesotho	95.	Sud	lan
19.	Cambodia	58.	Liberia	96.	Sur	inam
20.	Cameroon	59.	Madagascar	97.	Swa	aziland
21.	Cape Verde		Malawi	98.	Syr	ian Arab Republic
	Central African Republic	61.	Malaysia			ikistan
	Chad		Maldives	100		Tanzania, U. Rep. of
24.	Comoros	63.	Mali	101		Thailand
25.	Congo, Rep	64.	Mauritania	102		Timor-Leste
	Congo, Dem. Rep. of the	65.	Mauritius	103		Togo
	Côte d'Ivoire	66.	Moldova, Rep. of	104	٠.	Tonga
28.	Cuba		Mongolia	105		Trinidad and Tobago
29.	Djibouti	68.	Montserrat	106		Turkmenistan
30.	Dominica	69.	Mozambique	107		Turks and Caicos
31.	Dominican Republic	70.	Myanmar	108		Tuvalu
	Ecuador		Namibia	109		Uganda
33.	El Salvador	72.	Nauru	110		Ukraine
34.	Equatorial Guinea	73.	Nepal	111		Uzbekistan
	Eritrea		Nicaragua	112	•	Vanuatu
36.	Ethiopia		Niger	113		Vietnam
	Fiji Islands		Nigeria	114		Yemen
	Gabon		Pakistan	115		Zambia
	Gambia		Palau	116		Zimbabwe

# APPENDIX 5 Countries in the EVG- Quad Territory

1. Afg	hanistan	36.	Gambia	73. Palau
2. Ang		37.	Georgia	74. Papua New Guinea
3. Ang		38.	Ghana	75. Rwanda
_	igua and Barbuda	39.	Grenada	76. Saint Kitts and Nevis
5. Arn		40.	Guatemala	77. Saint Lucia
6. Bah	amas	41.	Guinea	78. Saint Vincent & the
7. Ban	gladesh	42.	Guinea-Bissau	Grenadines
8. Barl		43.	Guyana	79. Samoa
9. Beli	ze	44.	Haiti	80. São Tomé and Príncipe
10.	Benin	45.	Honduras	81. Senegal
11.	Bhutan	46.	India	82. Seychelles
12.	Bolivia	47.	Indonesia	83. Sierra Leone
13.	Botswana	48.	Jamaica	84. Solomon Islands
14.	British Virgin Islands	49.	Kazakhstan	85. Somalia
15.	Burkina Faso	50.	Kenya	86. South Africa
16.	Burundi	51.	Kiribati	87. South Sudan
17.	Cambodia	52.	Kyrgyzstan	88. Sri Lanka
18.	Cameroon	53.	Lao People's Dem.	89. Sudan
19.	Cape Verde		Rep.	90. Suriname
20.	Central African	54.	Lesotho	91. Swaziland
	Republic	55.	Liberia	92. Syrian Arab Republic
21.	Chad	56.	Madagascar	93. Tajikistan
22.	Comoros	57.	Malawi	94. Tanzania, U. Rep. of
23.	Congo, Rep	58.	Maldives	95. Thailand
24.	Congo, Dem. Rep. of	59.	Mali	96. Timor-Leste
	the	60.	Mauritania	97. Togo
25.	Côte d'Ivoire	61.	Mauritius	98. Tonga
26.	Cuba	62.	Moldova, Rep. of	99. Trinidad and Tobago
27.	Djibouti	63.	Mongolia	100. Turkmenistan
28.	Dominica	64.	Mozambique	<ol><li>Turks and Caicos</li></ol>
29.	Ecuador	65.	Myanmar	102. Tuvalu
30.	El Salvador	66.	Namibia	103. Uganda
31.	Equatorial Guinea	67.	Nauru	104. Uzbekistan
32.	Eritrea	68.	Nepal	105. Vanuatu
33.	Ethiopia	69.	Nicaragua	106. Vietnam
34.	Fiji Islands, Rep. of	70.	Niger	107. Yemen
	the	71.	Nigeria	108. Zambia
35.	Gabon	72.	Pakistan	109. Zimbabwe

### APPENDIX 7

## Countries in the BIC Territory

1. Afghanistan39. Gambia79. Papua New Guinea2. Angola40. Georgia80. Philippines3. Anguilla41. Ghana81. Rwanda4. Antigua and Barbuda42. Grenada82. Saint Kitts and Nevis5. Armenia43. Guatemala83. Saint Lucia6. Aruba44. Guinea84. Saint Vincent & the7. Bahamas45. Guinea-BissauGrenadines8. Bangladesh46. Guyana85. Samoa9. Barbados47. Haiti86. São Tomé and Príncipe10. Belarus48. Honduras87. Senegal11. Belize49. India88. Seychelles12. Benin50. Indonesia89. Sierra Leone
3. Anguilla 41. Ghana 81. Rwanda 4. Antigua and Barbuda 42. Grenada 82. Saint Kitts and Nevis 5. Armenia 43. Guatemala 83. Saint Lucia 6. Aruba 44. Guinea 84. Saint Vincent & the 7. Bahamas 45. Guinea-Bissau Grenadines 8. Bangladesh 46. Guyana 85. Samoa 9. Barbados 47. Haiti 86. São Tomé and Príncipe 10. Belarus 48. Honduras 87. Senegal 11. Belize 49. India 88. Seychelles
4. Antigua and Barbuda42. Grenada82. Saint Kitts and Nevis5. Armenia43. Guatemala83. Saint Lucia6. Aruba44. Guinea84. Saint Vincent & the7. Bahamas45. Guinea-BissauGrenadines8. Bangladesh46. Guyana85. Samoa9. Barbados47. Haiti86. São Tomé and Príncipe10. Belarus48. Honduras87. Senegal11. Belize49. India88. Seychelles
5.Armenia43.Guatemala83.Saint Lucia6.Aruba44.Guinea84.Saint Vincent & the7.Bahamas45.Guinea-BissauGrenadines8.Bangladesh46.Guyana85.Samoa9.Barbados47.Haiti86.São Tomé and Príncipe10.Belarus48.Honduras87.Senegal11.Belize49.India88.Seychelles
6. Aruba 44. Guinea 84. Saint Vincent & the 7. Bahamas 45. Guinea-Bissau Grenadines 8. Bangladesh 46. Guyana 85. Samoa 9. Barbados 47. Haiti 86. São Tomé and Príncipe 10. Belarus 48. Honduras 87. Senegal 11. Belize 49. India 88. Seychelles
7.Bahamas45.Guinea-BissauGrenadines8.Bangladesh46.Guyana85.Samoa9.Barbados47.Haiti86.São Tomé and Príncipe10.Belarus48.Honduras87.Senegal11.Belize49.India88.Seychelles
8. Bangladesh46. Guyana85. Samoa9. Barbados47. Haiti86. São Tomé and Príncipe10. Belarus48. Honduras87. Senegal11. Belize49. India88. Seychelles
9. Barbados47. Haiti86. São Tomé and Príncipe10. Belarus48. Honduras87. Senegal11. Belize49. India88. Seychelles
10. Belarus 48. Honduras 87. Senegal 11. Belize 49. India 88. Seychelles
11. Belize 49. India 88. Seychelles
13. Bhutan 51. Jamaica 90. Solomon Islands
14. Bolivia 52. Kazakhstan 91. Somalia
15. Botswana 53. Kenya 92. South Africa
16. British Virgin Islands 54. Kiribati 93. South Sudan
17. Burkina Faso 55. Kyrgyzstan 94. Sri Lanka
18. Burundi 56. Lao, People's Dem. Rep. 95. Sudan
19. Cambodia 57. Lesotho 96. Surinam
20. Cameroon 58. Liberia 97. Swaziland
21. Cape Verde 59. Madagascar 98. Syrian Arab Republic
22. Central African 60. Malawi 99. Tajikistan
Republic 61. Malaysia 100. Tanzania, U. Rep. of
23. Chad 62. Maldives 101. Thailand
24. Comoros 63. Mali 102. Timor-Leste
25. Congo, Rep 64. Mauritania 103. Togo
26. Congo, Dem. Rep. of 65. Mauritius 104. Tonga
the 66. Moldova, Rep. of 105. Trinidad and Tobago
27. Côte d'Ivoire 67. Mongolia 106. Turkmenistan
28. Cuba 68. Montserrat 107. Turks and Caicos
29. Djibouti 69. Mozambique 108. Tuvalu
30. Dominica 70. Myanmar 109. Uganda
31. Dominican Republic 71. Namibia 110. Ukraine
32. Ecuador 72. Nauru 111. Uzbekistan
33. El Salvador 73. Nepal 112. Vanuatu
34. Equatorial Guinea 74. Nicaragua 113. Vietnam
35. Eritrea 75. Niger 114. Yemen
36. Ethiopia 76. Nigeria 115. Zambia
37. Fiji Islands 77. Pakistan 116. Zimbabwe
38. Gabon 78. Palau

APPENDIX 8-A
Form BIC Sublicense Amendment to Form Sublicense Agreement attached hereto as Appendix 8-A

# APPENDIX 8-B

Form BIC Sublicense Amendment to Form Sublicense Agreement attached hereto as Appendix 8-B

APPENDIX 8-C
Form BIC Sublicense Amendment to Form Sublicense Agreement attached hereto as Appendix 8-C

## **APPENDIX 8-D**

Form BIC Sublicense Amendment to Form Sublicense Agreement attached hereto as Appendix 8-D