**BEFORE THE CONTROLLER OF PATENTS,**
**THE PATENT OFFICE,MUMBAI**

IN THE MATTER OF A PRE- GRANT OPPOSITION UNDER SECTION 25 (1), PATENTS ACT & RULE 55, PATENTS RULES, 2003

And

IN THE MATTER OF PATENT APPLICATION NO.**201627008488** DATED 11.03.2016 TITLED **COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS** IN THE NAME OF GILEAD PHARMASSET, LLC. 333 LAKESIDE DRIVE, POSTER CITY, CALIFORNIA, 94404, U.S.A.

…..APPLICANT

And

IN THE MATTER OF REPRESENTATION BY WAY OF NOTICE OF OPPOSITION FILED BY THE DELHI NETWORK OF POSITIVE PEOPLE (DNP+) .....OPPONENT

**REPRESENTATION BY WAY OF OPPOSITION U/S 25(1)**

1. A pre-grant opposition under Section 25(1) of the Patents Act, 1970, is being submitted by the Opponent against Indian Patent Application No. **201627008488** (hereinafter referred to as the "Present Application") in the name of Gilead Pharmasset LLC (hereinafter referred to as the "Applicant").

**OPPONENT'S *LOCUS STANDI***

2. The Opponent, Delhi Network of Positive People (DNP+), is a community based non-non-profit organisation representing the needs of people living with HIV/AIDS ("PLHIV") and Hepatitis C (HCV), and is registered as a

Trust with its registered address at Flat no. A1-5, Property 141 Gali No. 3, Harijan Colony, Neb Sarai, New Delhi, 110068.

3. The Opponent is a PLHIV network working, amongst other things, extensively in the area of access to medicines. Their work includes but is not limited to service delivery, treatment literacy and community empowerment. The main focus and emphasis is advocating for access to medicines as they believe every individual should get treatment and no one should suffer due to lack of medicines. Of the main concern to the Opponent, is the impact of product patent protection on access to effective and affordable Hepatitis C medicines for people not just in India but across the developing world.

4. Section 25(1) of the Patents Act allows *any person*, to represent an opposition against grant of a patent. Therefore, the Opponent has the *locus standi* to make this representation against grant of patent.

**BACKGROUND OF HEPATITIS C**

5. According to World Health Organisation (WHO) Global Hepatitis Report, 2017 an estimated 325 million people worldwide are living with chronic Hepatitis B or C virus infection. The said report indicates that 71 million people are estimated to be living with chronic Hepatitis C infection with majority of them with limited access to life saving HCV testing and treatment. Increasing mortality rates due to Hepatitis C infection when compared with HIV and Tuberculosis deaths is a cause of concern. In 2016, viral hepatitis caused 1.34 million deaths[1].

6. Hepatitis C is a blood borne virus. The infection spreads from exposure to infected blood during unsafe injection practice, injecting drug use, transfusion of unscreened and unsafe blood products and in unsafe health care. In India, a rough estimate indicates there are 10 to 15 million chronic

1 http://www.worldhepatitisalliance.org/news/sep-2017/viral-hepatitis-kills-more-people-hiv-malaria-or-tuberculosis

carriers of HCV[2], absence of a surveillance system to track HCV infection in India and presence of PLHIV community with undetected HCV co-infection further necessitates the need for early access to care and treatment. Though Hepatitis C is red flagged as a major public health concern and termed as a ticking time bomb by the WHO, access to treatment and medicines continues to be abysmally low for people with hepatitis C infection. Of the many obstacles in access to HCV medicines, patent protection leading to high cost of medicines poses to be a major barrier in accessing affordable HCV medicines.

7. In the 1990s, the phosphoprotein non-structural protein 5A (hereinafter referred to as "NS5A") was widely investigated. By the late 1990s, NS5A had also been identified as exhibiting a role in cell growth regulation [Ghosh, *et al.*, "Hepatitis C virus NS5A protein modulates cell cycle regulatory genes and promotes cell growth" (1999) *Journal of General Virology* 80(5):1179–83]. NS5A inhibitors block a virus protein, NS5A, that Hepatitis C Virus (HCV) needs to reproduce and for various stages of infection. Velpatasvir is a NS5A inhibitor in the Direct-Acting Antiviral (DAA) category. The other known NS5A inhibitors include Ledipasvir, Sofosbuvir and Daclatasvir.

**THE PRESENT APPLICATION**

8. The Present Application bearing application no. 201627008488, titled "*Combination Formulation of Two Antiviral Compounds*", was filed by Gilead Pharmasset LLC (hereinafter "the Applicant") in India on 11.03.2016. The Present Application is a national phase application of PCT application which was filed under the PCT convention on 30.01.2014 and

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2 Bhattacharya PK, Roy A (2015) Management of Hepatitis C in the Indian Context: An Update. J Liver 4:187 doi:10.4172/2167-0889.1000187

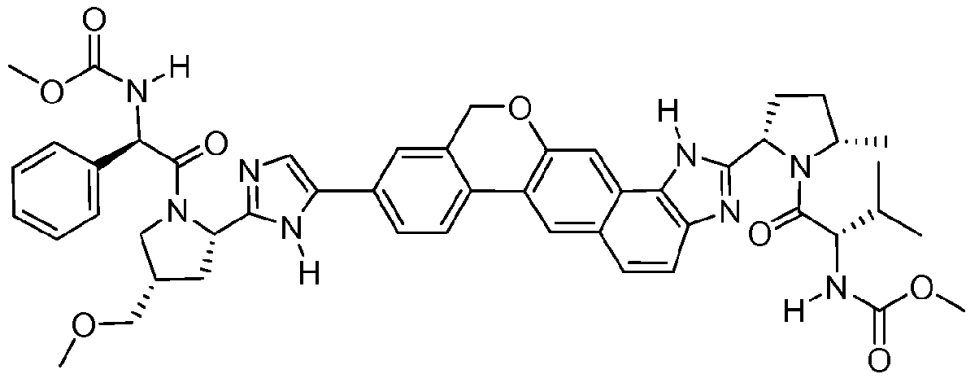
https://www.omicsonline.org/open-access/management-of-hepatitis-c-in-the-indian-context-an-update-2167-0889-1000187.php?aid=62474#6

was published with publication number WO 2015/030853. It derives priority from three applications. These applications are US 61/870,712 with the filing date of 27.08.2013, US 61/898,690 with a filing date of 01.11.2013 and US 61/907,308 with a filing date of 21.11.2013.

9. The Application filed a request for examination on 15.07.2016. As on the date of filing of this pre-grant representation, no Examination Report has been issued.

**ALLEGED INVENTION**

10. The abstract of the Present Application indicates that it discloses "*pharmaceutical compositions comprising Compound I, having the formula (I) and an effective amount of Sofosbuvir wherein the Sofosbuvir is substantially crystalline.*" The compound of Formula I is reproduced below, and is known as Velpatasvir:



Compound I

11. The Compound I is also disclosed in the complete specification and refers to WO 2013/075029 and US Patent 8,575,135 as the prior disclosing documents of Compound I. (See complete specification of the Present Application at para 3 and 4 at internal page 1)

12. The Applicant has admitted in the complete specification that Compound I (i.e. Velpatasvir) and Sofosbuvir are known to be effective anti-HCV agents. (See the Present Application at internal pages 6 and 10)

13. The Applicant further states that, "*Sofosbuvir has previously been described in U.S. Pat. No.: 7,964,580 and U.S. Pat. Pub. Nos: 2010/0016251,*

*2010/0298257, 201 1/0251 152 and 2012/0107278. The Sofosbuvir is provided as substantially crystalline in the pharmaceutical compositions described herein. Examples of preparing crystalline forms of sofosbuvir are disclosed in U.S. Pat. Pub. Nos: 2010/0298257 and 201 1/025 1152, both of which are incorporated by reference. Crystalline forms, Forms 1-6, of sofosbuvir are described in U.S. Pat. Pub. Nos.: 2010/0298257 and 201 1/025 1152, both of which are incorporated by reference. Forms 1-6 of sofosbuvir have the following characteristic X-ray powder diffraction (XRPD) pattern 29-values measured according to the XRPD methods*…" (See complete specification of the Present Application at internal page 10, para 51)

14. Therefore, per the Applicant, the crystalline forms of Sofosbuvir were already known in the art on the priority date of the present application.

15. Further, the Applicant has admitted that the pharmaceutical composition disclosed therein can be prepared in a manner known in the art, and refers to Remington's Pharmaceutical Sciences, Mace Publishing Co., Philadelphia, PA 17th Ed. (1985); and Modern Pharmaceutics, Marcel Dekker, Inc. 3rd Ed. (G.S. Banker & C.T. Rhodes, Eds.). (See complete specification of Present Application at internal page 12 at para 57).

**CLAIM CHART**

16. The Present Application was filed with a total of 59 claims. Vide Form-13 dated 16.03.2016, the Applicant filed for amendment of claims. The said amendment brought down the number of claims to 10. This Opposition

These 10 product claims are discussed below:

| Claim no. | Coverage | Comment |
|---|---|---|
| 1 | Composition as fixed dose combination tablet with:<br>i. About 15-25% w/w of Velpatasvir in amorphous dispersion of copovidone; | |

| | | |
|---|---|---|
| | ii. About 35-45% of crystalline Sofosbuvir with XRPD 2θ reflections (°± 0.2θ) at about:6.1, 10.4 and 20.8;<br>iii. About 30-40% w/w of microcrystalline cellulose;<br>iv. About 1-5% w/w of croscarmellose sodium;<br>v. About 0.5% to about 2.5% w/w of magnesium stearate | |
| 2 | Composition of claim 1 comprising about 40% w/w of Sofosbuvir | The amended claim incorrectly claims dependency of claim 60. The Opponent is making the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 2 is on claim 1 |
| 3 | Composition of claim 1 comprising 20% w/w of the solid dispersion | The amended claim incorrectly claims dependency of claim 60. The Opponent is making the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 3 is on claim 1 |
| 4 | Composition of claim 1 comprising about 35.5% w/w of microcrystalline cellulose | The amended claim incorrectly claims dependency of claim 60. The Opponent is making |

| | | |
|---|---|---|
| | | the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 4 is on claim 1 |
| 5 | Composition of claim 1 comprising about 3% w/w of croscarmellose sodium | The amended claim incorrectly claims dependency of claim 60. The Opponent is making the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 5 is on claim 1 |
| 6 | Composition of claim 1 comprising about 1.5% w/w of magnesium stearate | The amended claim incorrectly claims dependency of claim 60. The Opponent is making the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 6 is on claim 1 |
| 7 | A pharmaceutical composition of fixed dose combination tablet with:<br>i. Substantially Amorphous Velpatasvir dispersed within a polymer matrix formed by copovidone in solid dispersion of about 1:1 | |

| | | |
|---|---|---|
| | ii. About 40% of substantially crystalline Sofosbuvir characterized by XRPD 2θ-reflections (°±0.2θ) at about: 6.1, 10.4 and 20.8<br>iii. About 3.5% w/w of microcrystalline cellulose;<br>iv. About 3% w/w of croscarmellose sodium;<br>v. About 1.5% w/w of magnesium stearate | |
| 8 | A composition in a fixed dosage form tablet comprising<br>i. About 200 mg of a solid dispersion comprising substantially amorphous Velpatasvir dispersed within a polymer matrix formed by copovidone, with weight ratio of Velpatasvir and copovidone being about 1:1;<br>ii. About 400 mg of crystalline Sofosbuvir with XRPD 2θ- reflections (°±0.2θ) at about:6.1, 10.4 and 20.8<br>iii. About 355 mg of microcrystalline cellulose;<br>iv. About 30mg of croscarmellose sodium;<br>v. About 15mg of magnesium stearate | |
| 9 | Composition of claim 8 wherein the tablet comprises a film coating | The amended claim incorrectly claims dependency of claim 67. The Opponent is making the present submissions assuming that the Applicant |

| | | |
|---|---|---|
| | | has made such amendment in error and the correct dependency of claim 9 is on claim 8 |
| 10 | Composition of claim 9 wherein the film coating is a polyvinylalcohol-based coating | The amended claim incorrectly claims dependency of claim 68. The Opponent is making the present submissions assuming that the Applicant has made such amendment in error and the correct dependency of claim 10 is on claim 9 |

**SUMMARY OF GROUNDS CONSIDERED FOR OPPOSITION**

17. The Opponent brings this opposition under the following grounds, amongst others, each of which are without prejudice to one another:

i. Claims 1-10 of the Present Application are not novel as the alleged invention claimed in these claims have been published before the priority date. Therefore, the Opponent brings this Opposition under **Section 25(1)(b)(ii)**- that the invention as claimed in the complete specification has been published before the priority date of the claim in any other document;

ii. Claims 1-10 the Present Application lack inventive step, and therefore fail under Sections 2(1)(j) and 2(1)(ja) of the Patents Act. Therefore, the Opponent brings this opposition under **Section 25(1)(e)**-that the invention so far as claimed in any claim of the complete specification is obvious and clearly does not involve any inventive step, having regard to the matter published before the priority date in India or elsewhere in any document.

iii. Claims 1-10 of the Present Application do not satisfy the test of Section 3(e) of the Patents Act as the subject matter does not exhibit any synergistic

effect. Therefore, the Opponent brings this opposition under **Section 25(1)(f)** -that the subject of any claim of the complete specification is not an invention within the meaning of this Act.

iv. Claims 1-10 of the Present Application do not satisfy the test of Section 3(d) of the Patents Act as the subject matter does not exhibit any synergistic effect. Therefore, the Opponent brings this opposition under **Section 25(1)(f)** -that the subject of any claim of the complete specification is not an invention within the meaning of this Act.

v. The method to arrive at claims 1-10 of the Present Application has not been clearly described in the Present Application. Therefore, the Opponent brings this Opposition under **Section 25(1)(g)**- That the complete specification does not sufficiently and clearly describe the invention or the method by which it is to be performed

vi. The Opponent brings this opposition **under Section 25(1) (h)** of the Act- viz. that the Patent Applicant has failed to disclose the Controller information required by Section 8 or has furnished information which in any material particular was false to his knowledge.

**DETAILED GROUNDS**

**I. CLAIMS 1 TO 10 ARE NOT NOVEL, AND THEREFORE HAVE TO BE REJECTED UNDER SECTION 25(1)(e) OF THE PATENTS ACT**

18. Section 2(1)(j) of the Patents Act defines an "invention" as "a **new** product or process involving an **inventive step** and **capable of industrial application**" (emphasis added). Section 25 (2)(b)(ii) of the Patents Act allows opposition of a patent if the alleged invention, as claimed in any claim of the complete specification has been published before the priority date of the claim in India or elsewhere, in any other document. Therefore, claims of a patent are to be rejected if a publication dated before the priority date of the patent application in question discloses the alleged invention. Whether the prior publication discloses the alleged invention may be determined by comparing the claims of the patent application in question to

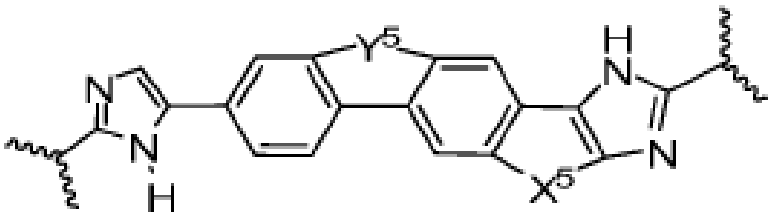
the disclosures in the prior art, read in light of the general knowledge available to a person skilled in the art.

19. It is the Opponent's claim that document published before the date of priority of the Present Application discloses the compounds of claims 1-10. Therefore, claims 1-10 should be rejected for lack of novelty.

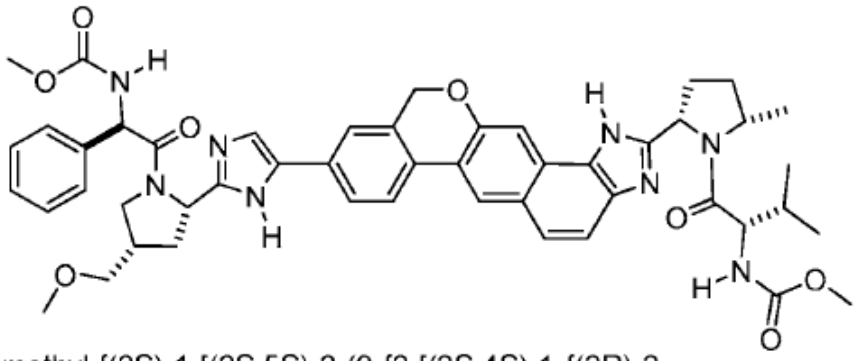
**WO 2013/075029** (Published 23.05.2013)

20. The Opponent relies on patent application publication no. WO 2013/075029 A1 (hereinafter "WO '029" and annexed hereto as **Exhibit A**) titled, "*Condensed Imadazolylimidazole as antiviral compounds*" published on 23.05.2013. Given that this document has been published before the date of priority, viz. 11.06.2014, this publication can be relied on as prior art for the present application. The publication discloses a compound for use as HCV therapeutic agent.

21. WO '029 indicates that the application discloses "*a pharmaceutical composition for use in treating hepatitis C(HCV).*" (See running page 40 at lines 17-19 at WO '029). WO '029 discloses a compound, the Markush structure of which is reproduced hereinbelow (see running page 39at **Exhibit A**)



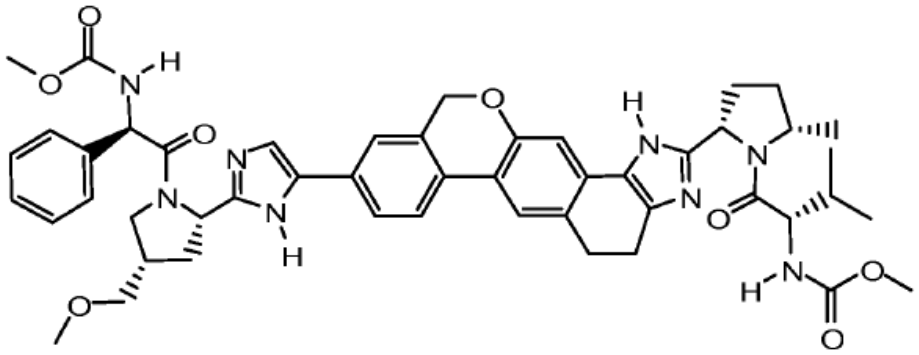

22. Attention is drawn in particular to running page 245at **Exhibit A** wherein Example PY discloses the process for synthesizing the following compound:



methyl {(2S)-1-[(2S,5S)-2-(9-{2-[(2S,4S)-1-{(2R)-2-[(methoxycarbonyl)amino]-2-phenylacetyl}-4-(methoxymethyl)pyrrolidin-2-yl]-1H-imidazol-5-yl}-1,11-dihydroisochromeno[4',3':6,7]naphtho[1,2-d]imidazol-2-yl)-5-methylpyrrolidin-1-yl]-3-methyl-1-oxobutan-2-yl}carbamate

Formula I

23. Attention is also drawn to the claims of WO '029. It is submitted that one of the compounds claimed in claim 22, in particular the second compound is depicted as following:



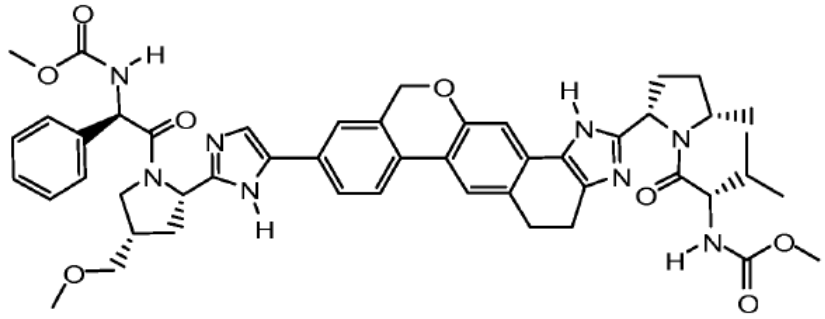
24. Attention is drawn to claim 31 of WO '029, which claims, "*A pharmaceutical composition comprising a compound as in claims 1-24, at least one nucleoside or nucleotide inhibitor of HCV NS5B polymerase, and at least one pharmaceutically acceptable carrier*"

25. It may be pointed out here that WO '029 does not define pharmaceutically acceptable carrier in the complete description. However, the complete specification of WO '029 indicates that, "*The compounds of this disclosure are formulated with conventional carriers and excipients, which will be selected in accord with ordinary practice. Tablets will contain excipients, glidants, fillers, binders and the like. Aqueous formulations are prepared in*

*sterile form, and when intended for delivery by other than oral administration generally will be isotonic.* ***All formulations will optionally contain excipients such as those set forth in the Handbook of Pharmaceutical Excipients*** *(1986).*" Emphasis supplied (See **Exhibit A** at running page 53 at lines 28-32). A review of the Handbook of Pharmaceutical Excipients (annexed hereto as **Exhibit B**) reveals that excipients including microcrystalline cellulose (see **Exhibit B** atrunning pages313-316), croscarmellose sodium (see **Exhibit B**at running pages 317-319), and magnesium stearate (See **Exhibit B** at running pages 320-323). Since WO '029 has referred to Handbook of Pharmaceutical Excipients, the teachings in the handbook would be considered to be included in the complete specification of WO '029.

26. Further, WO '029 reveals, "*Tablets containing the active ingredient in admixture with non-toxic pharmaceutically acceptable excipient which are suitable for manufacture of tablets are acceptable. These excipients may be, for example, inert diluents, such as calcium or sodium carbonate, lactose, lactose monohydrate,* ***croscarmellose sodium****, povidone, calcium or sodium phosphate; granulating and disintegrating agents, such as maize starch, or alginic acid; binding agents, such as cellulose,* ***microcrystalline cellulose****, starch, gelatin or acacia; and lubricating agents, such as* ***magnesium stearate****, stearic acid or talc.*" Emphasis supplied (See **Exhibit A** at running page 55 at last line, and running page 56 at lines 1-6).

27. Further, attention is drawn to claim 33 of WO '029, which claims, " *The pharmaceutical composition of claim 31 or 32, wherein the compound is of the formula*

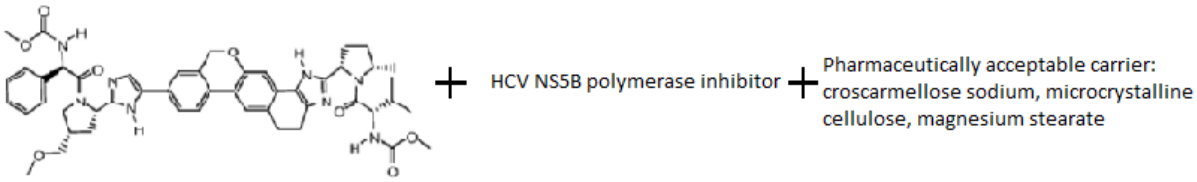


"

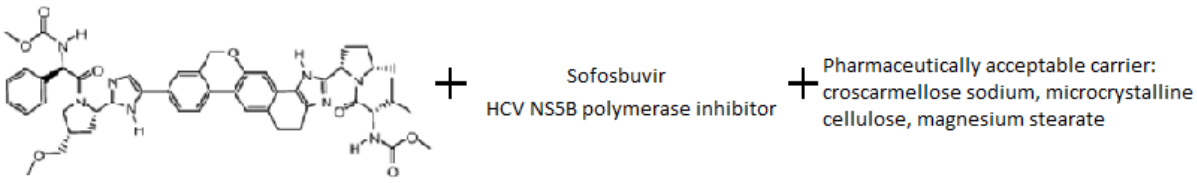
28. Further, claim 34 of WO ’029 claims, “*The pharmaceutical composition of any one of claims 31-33, wherein the nucleoside or nucleotide inhibitor of HCV NS5B polymerase is Sofosbuvir*”.

29. Therefore, on reading claim 34, one would attain a composition comprising the compound of formula I (as in claim 33), pharmaceutically acceptable carrier such as microcrystalline cellulose, croscarmellose sodium and magnesium stearate, and Sofosbuvir as the inhibitor of NS5B polymerase.

30. Below is a pictorial representation of the composition in claim 33 of WO ’029

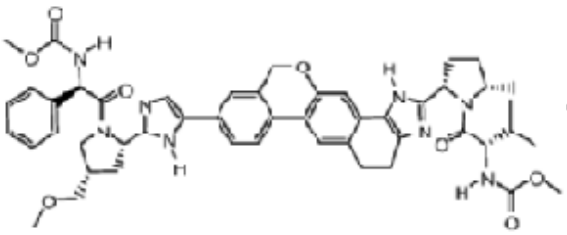
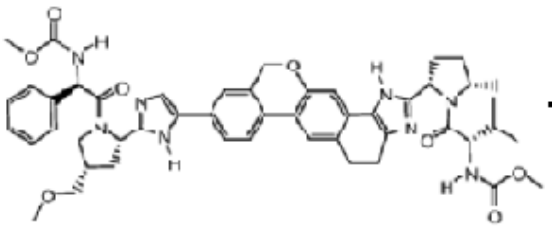
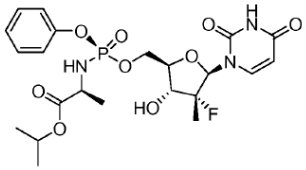



31. Below is a pictorial representation of claim 34 of WO ’029




32. Below is a comparison of the composition claimed in claim 34 of WO ’029 and claim 1 and claim 8 of the present application:

| **WO ’029**<br>**Claim 34** | **Present application**<br>**Compound of Claim 1 and claim 8** |
|---|---|
| Pharmaceutical composition comprising | A pharmaceutical composition comprising: |

| | |
|---|---|
|  <br>+<br>Sofosbuvir<br>+<br>At least one Pharmaceutically acceptable carrier (disclosed to include microcrystalline cellulose, croscarmellose sodium and magnesium stearate) |  <br>+<br>Sofosbuvir having the formula<br>  <br>+<br>microcrystalline cellulose<br>+<br>croscarmellose sodium<br>+<br>magnesium stearate |

33. Clearly, the combination in claim 1 and claim 8 of the Present Application has been disclosed in WO '029. Hence, the combination claimed in the Present Application lacks novelty. Given claims 2-7 are dependent on claim 1, and claims 9-10 are dependent on claim 8, claims 1-10 of the Present Application lack novelty. Therefore, claims 1-10 of the Present Application should be rejected for lack of novelty.

**II. CLAIMS 1 TO 10 ARE OBVIOUS, DO NOT INVOLVE A TECHNICAL ADVANCE, AND LACK INVENTIVE STEP AS DEFINED UNDER SECTION 2(1)(ja) AND THEREFORE HAVE TO BE REJECTED UNDER SECTION 25(1)(e) OF THE PATENTS ACT**

34. Section 2(1) (j) defines an "invention" as "*a new product or process involving an inventive step and capable of industrial application*." For an

alleged invention to qualify for a patent, it must satisfy the criteria of inventive step. Section 2(1)(ja) of the Patents Act defines an inventive step as "*a feature of an invention that involves technical advance as compared to the existing knowledge ... and that makes the invention not obvious to a person skilled in the art*".

35. Sub-sections (j) and (ja) of Section 2(1) of the Patents Act thus require a Patent Applicant to show that the feature of the alleged invention involve a technical advance and that it is not obvious to a person skilled in the art(POSITA).

36. Section 25(1)(e) of the Patents Act provides a ground for opposition if the alleged invention is obvious and does not involve an inventive step having regard to matter published, as described in section 25(1)(b) of the Patents Act. The published matter to be considered under this provision includes matter published in India or elsewhere in any document before the priority date of the alleged invention. The Opponent submits that claims 1-10 of the Present Application lack an inventive step and therefore should be rejected.

37. On the priority date of the alleged invention, as will be explained below, the following were well known to persons skilled in the art:

i. Formulation of HCV polymerase inhibitors in a polymer matrix including that of copovidone, and use of microcrystalline cellulose, croscarmellose sodium and magnesium stearate as excipients;

ii. Combination of known HCV inhibitors with other HCV polymerase inhibitors;

iii. Composition comprising Velpatasvir and Sofosbuvir.

**i. That formulation of HCV polymerase inhibitors in a polymer matrix including that of copovidone and use of microcrystalline cellulose, croscarmellose sodium and magnesium stearate as excipients was known**

**WO/2010/017432** (Published 11.02.2010)

38. The Opponent relies on patent publication no. WO/2010/017432, titled "*Pharmaceutical formulations of an hcv protease inhibitor in a solid molecular dispersion*" published on 11.02.2010 (hereinafter referred to as "WO '432" and annexed as **Exhibit C)**. Given that this publication was published before the priority date of the Present Application viz. 27.08.2013, WO '432 can be relied as valid prior art.

39. The teachings of WO '432 have been succinctly described in the Abstract, wherein it sates, "*The present invention provides pharmaceutical formulations of an HCV protease inhibitor in a solid dispersion with an excipient which provided advantageous pharmacokinetic properties for inhibiting or treating HCV infection. In preferred embodiments, the excipient is at least one polymer. The present invention also provides processes for manufacturing such formulations as well as uses of said composition for the manufacture of a medicament for treating or ameliorating one or more symptoms of HCV or disorders associated with HCV in a subject in need thereof using said formulations.*" (See "Abstract" at **Exhibit C,**at running page number 324).

40. WO '432 further notes that, "*The present invention provides a pharmaceutical formulation comprising: (a) Compound I; and (b) an excipient; wherein (a) and (b) are in a solid molecular dispersion. In preferred embodiments, the excipient is at least one polymer. According to the present invention, Compound 1 in a stable amorphous form is uniformly dispersed in a polymer. The solid dispersions exhibit excellent mechanical and physical attributes necessary for subsequent roller compaction, milling, blending, and tablet compression. In certain embodiments, the formulations of the present invention may optionally further comprise one or more additional pharmaceutically acceptable excipients.*" (See **Exhibit C** atrunning page 327, lines 20-27). Further, in one of the preferred embodiments, it also identifies the ratio by weight of (a) to (b) at about 1:1 (See **Exhibit C** at running page 328 at lines 17-18).

41. WO ’432 also discloses that, “*The solid molecular dispersions and formulations of the present invention contain Compound I in amorphous form substantially free of crystalline and/or solvate forms. Suitable polymers for use in the solid dispersions of the present invention include carbomer (i.e., a polymer of acrylic acid), hydroxypropyl cellulose, hydroxyethyl cellulose, hydroxypropylmethylcellulose, polyacrylate polymer, polyethylene oxide, polyvinyl alcohol, poloxamer, povidone, polytheylene glycol, copovidone, or a combination of two or more thereof. Polymers used as a solid dispersion agent may make up about 5% to about 95% by weight of the pharmaceutical formulation. In certain embodiments, polymer used as a solid dispersion agent is present at about 10% to about 90% by weight of the pharmaceutical formulation. In one preferred embodiment, polymer used as a solid dispersion agent is present at about 20% to about 80% by weight of the pharmaceutical formulation.*” (See **Exhibit C,**at running page 335, lines 8-18).

42. Attention is drawn to the examples provided in WO ’432 for preparation of formulations. The tables of examples are reproduced below for convenience (See **Exhibit C,** Tables 1A and 1B at running page 351, Tables 3A and 3B at running pages 351-352, and Table 3C at running page 353)

**Table 1A Exemplary solid dispersions A-E prepared by hot melt extrusion**

| Ingredients (mg) | Formulation | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| Compound I or a solvate thereof | 150 | 30 | 150 | 30 | 30 |
| Copovidone | 150 | 30 | 150 | 30 | 30 |
| Triethyl Citrate | 15 | 3 | - | - | - |
| Vitamin E TPGS[1] | - | - | - | 1.5 | - |
| Span 20[2] | - | - | - | - | 1.5 |
| Lactic Acid | - | - | 15 | 1.5 | - |
| Stearic Acid | - | - | - | - | 1.5 |
| Succinic Acid | - | 1.5 | - | - | - |

| Table 1B Exemplary pharmaceutical formulation F | |
|---|---|
| **Ingredients (mg)** | **Formulation F** |
| Compound I or a solvate thereof | 400 |
| Copovidone | 400 |
| Triethyl Citrate | 40 |
| Sodium Lauryl Sulfate | 40 |
| Sodium Croscarmellose | 340 |
| Pregelatinized Starch | 100 |
| Silicon Dioxide | 2.2 |
| Magnesium Stearate | 2.2 |

| Table 3A Exemplary pharmaceutical formulations G-Q | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ingredients (mg)** | **Formulation** | | | | | | | | | | |
| | **G** | **H** | **I** | **J** | **K** | **L** | **M** | **N** | **O** | **P** | **Q** |
| Compound I or a solvate thereof | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Copovidone | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 73.9 | 135.3 |
| MCC, Avicel PH 102 | 50 | 72.2 | 45.8 | 54.2 | 65.6 | 34.4 | 59.6 | 40.4 | 27.8 | 76.1 | 14.7 |
| Lactose Mono. Spray Dried | 86 | 73.1 | 98.9 | 73.1 | 73.1 | 98.9 | 73.1 | 98.9 | 98.9 | 86 | 86 |
| Sodium Lauryl Sulfate | 20 | 17 | 17 | 23 | 23 | 17 | 17 | 23 | 23 | 20 | 20 |
| Sodium Croscarmellose | 40 | 34 | 34 | 46 | 34 | 46 | 46 | 34 | 46 | 40 | 40 |
| Magnesium Stearate | 2 | 1.7 | 2.3 | 1.7 | 2.3 | 1.7 | 2.3 | 1.7 | 2.3 | 2 | 2 |
| Colloidal Silicon Dioxide | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

| Table 3B Exemplary pharmaceutical formulations R-T | | | |
|---|---|---|---|
| **Ingredients (mg)** | **Formulation** | | |
| | **R** | **S** | **T** |
| Compound I or a solvate thereof | 100 | 50 | 133 |
| Copovidone | 100 | 150 | 133 |
| Crospovidone | 10 | 10 | -- |
| Sodium Croscarmellose | -- | -- | 80 |
| Microcrystalline Cellulose | -- | -- | 33.3 |
| Sodium Lauryl Sulfate | 10 | 5 | 13.3 |
| Silicon Dioxide | 1.25 | 1.25 | 0.73 |
| Magnesium Stearate | 0.63 | 0.63 | 0.73 |
| Pregelatinized Starch | 50 | 25 | 33.3 |

| Table 3C. Exemplary Pharmaceutical Formulations U - V | | |
|---|---|---|
| **Ingredients (mg)** | **Formulations** | |
| | **U (mg/tablet)** | **V (mg/tablet)** |
| Compound I or solvate | 100 | 300 |
| Copovidone (Plasdone S-630) | 100 | 300 |
| Microcrystalline Cellulose (PH 102) | 52 | 156 |
| Sodium Lauryl Sulfate | 15 | 45 |
| Sodium Croscarmellose (Ac-Di-Sol) | 30 | 90 |
| Colloidal Silicon Dioxide (Cab-O-Sil) | 1.5 | 4.5 |
| Magnesium Stearate | 1.5 | 4.5 |
| Film Coat Opadry II Yellow | 12.0 | 36.0 |

43. A review of these tables would indicate that of the 20 formulation exemplified, 20 of them (Formulations A-V except R and S) comprised of the HCV protease inhibitor, Copovidone, Microcrystalline Cellulose (MCC), Sodium Croscarmellose and Magnesium Stearate.

44. Hence, a POSITA, working on HCV formulations, on reading WO '432, would be motivated to develop pharmaceutical formulations of an HCV protease inhibitor in a solid dispersion using various polymers including copovidone and wherein the ratio of HCV protease inhibitor to that of excipients by weight would be 1:1. Further, POSITA would also be aware the weight range of the solid dispersion that forms a part of the pharmaceutical formulation. Further, POSITA would also be motivated to use the HCV protease inhibitor with Copovidone, Microcrystalline Cellulose (MCC), Sodium Croscarmellose and Magnesium Stearate.

**ii. Combination of known HCV inhibitors with other HCV polymerase inhibitors was known in prior art**

**WO2011156578** (Published:15.12.2011)

45. The Opponent relies on patent publication **WO2011156578** published on 15.12.2011, titled, "*Solid Compositions* " (hereinafter referred to as "WO '578" and annexed hereto as **Exhibit D**). It is submitted the since WO '578 was published much before the priority date of the Present Application, viz. 27.08.2013, WO '578 may be relied upon as a valid prior art document.

46. WO '578 in its abstract states that, "*The present invention features solid compositions comprising Compound $I_A$, $I_B$, $I_C$, $I_D$, or a pharmaceutically acceptable salt thereof, in an amorphous form. In one embodiment Compound $I_A$, $I_B$, $I_C$, $I_D$, or a pharmaceutically acceptable salt thereof, is formulated in an amorphous solid dispersion which comprises a pharmaceutically acceptable hydrophilic polymer and preferably a pharmaceutically acceptable surfactant*." (See **Exhibit D** at abstract at running page 383).

47. WO '578 relates to "*solid compositions comprising a HCV inhibiting compound or a pharmaceutically acceptable salt thereof, wherein said HCV inhibiting compound is selected from the group*" disclosed therein (See **Exhibit D,** internal page 1, lines 26-28). Further, copovidone is identified as the hydrophilic polymer in several embodiment (See **Exhibit D** at running page 388 at lines 4-5, running page 398 at line 5, 11, 16).

48. WO '578 further discloses an embodiment wherein, "… *a solid composition of the invention comprises (1) Compound IA, IB, IC or ID (a pharmaceutically acceptable salt thereof), (2) a HCV protease inhibitor, and (3) a HCV polymerase inhibitor (e.g., a non-nucleoside polymerase inhibitor, or preferably a nucleoside polymerase inhibitor). Non-limiting examples of protease and polymerase inhibitors are described above*…" (See **Exhibit D** at running page 399 at lines 30-31 and running page 400 at line1-3)

49. WO ’578 also indicates that the compound of that application may be used in combination with other HCV protease inhibitors. It notes, “*In yet another embodiment, a solid composition of the invention comprises (1) Compound IA, IB, IC or ID (a pharmaceutically acceptable salt thereof), (2) a HCV protease inhibitor, and (3) a HCV polymerase inhibitor (e.g., a non-nucleoside polymerase inhibitor, or preferably a nucleoside polymerase inhibitor)…. For instance, the protease inhibitor can be selected from…GS-9132 (Gilead), GS-9256 (Gilead), GS-9451 (Gilead)… And the HCV polymerase inhibitor can be selected from, without limitation…GS-9669 (Gilead)… GS-6620 (Gilead)… PSI-7977 (Pharmasset), PSI-938 (Pharmasset), … The polymerase inhibitor may be a nucleotide polymerase inhibitor, such as… GS-6620 (Gilead)… PSI-7977 (Pharmasset), PSI-938 (Pharmasset)… ,or a combination therefore…”* (See **Exhibit D** at running page 399 at lines 26-31 and running page 400 at lines 1-29).

50. It may be pointed out here that one of the HCV polymerase inhibitors suggested to be used in the solid composition, is Pharmasset’s PSI-7977, better known as *Sofosbuvir*. In fact, PSI-7977 is mentioned as preferred inhibitor in three other embodiments that have been disclosed in WO ’578 (See **Exhibit D**at running page 401 at lines 3, 8 and 12).

51. Further, WO ’578 notes that, “*At least one additive selected from flow regulators, binders, lubricants, fillers, disintegrants, or plasticizers may be used in compressing the solid dispersion. These additives can be mixed with ground or milled solid dispersion before compacting. Disintegrants promote a rapid disintegration of the compact in the stomach and keeps the liberated granules separate from one another. Non- limiting examples of suitable disintegrants are cross-linked polymers such as cross-linked polyvinyl pyrrolidone, cross-linked sodium carboxymethylcellulose or* ***sodium croscarmellose****. Non-limiting examples of suitable fillers (also referred to as bulking agents) are lactose monohydrate, calcium hydrogenphosphate,* ***microcrystalline cellulose*** *(e.g., Avicell), silicates, in particular silicium dioxide, magnesium oxide, talc, potato or corn starch, isomalt, or polyvinyl*

*alcohol. Non-limiting examples of suitable flow regulators include highly dispersed silica (e.g., colloidal silica such as Aerosil), and animal or vegetable fats or waxes. Non-limiting examples of suitable lubricants include polyethylene glycol (e.g., having a molecular weight of from 1000 to 6000),* ***magnesium and calcium stearates****, sodium stearylfumarate, and the like*." Emphasis supplied (See **Exhibit D** at running page 406).

52. Therefore, a POSITA on reading WO '578 would be taught different HCV inhibitors could be used in combination, wherein one of the HCV inhibitors can be Sofosbuvir. Further, WO '578 would also motivate a POSITA to use HCV protease inhibitor in a solid dispersion with polymers such as copovidone, and use Microcrystalline Cellulose (MCC), Sodium Croscarmellose and Magnesium Stearate as fillers in the composition.

**WO2013059630** (Published: 25.05.2013)

53. The Opponent relies on patent publication WO2013059630, titled, "*Methods for treating HCV comprising at least two direct acting antiviral agent, ribavirin but not interferon*", published on 25.05.2013 (hereinafter referred to as "WO '630" and annexed hereto as **Exhibit E**). Given that WO '630 was published before the priority date of the Present Application, viz. 28.08.2013, WO '630 may be relied upon as valid prior art document.

54. The purported invention in WO '630 "*features interferon-free therapies for the treatment of HCV. Preferably, the treatment is over a short duration, such as no more than 12 weeks.* ***In one aspect, the therapies comprise administering at least two direct antiviral agents and ribavirin to a subject with HCV infection.*** *For example, the therapies comprise administering to the subject effective amounts of therapeutic agent 1, therapeutic agent 2(or therapeutic agent 3), an inhibitor of cytochrome P450 (e.g.,ritonavir), and ribavirin)."* [emphasis supplied] (See **Exhibit E** at abstract at running page 423).

55. The brief summary of WO '630 indicates that it discloses methods for treating HCV infection, wherein, "*The methods comprise administering at*

*least two direct acting antiviral agents (DAAs) and ribavirin for a duration of no more than twelve weeks, or for another duration as set forth herein. Preferably, the duration of the treatment is twelve weeks*." (See **Exhibit E** atrunning page 424 at paragraph [0005]).

56. WO '630 discloses several examples wherein PSI-7977 (Sofosbuvir) may be used in combination with at least 9 other HCV inhibitors. Of these examples at least 5 were direct acting anti-virals. WO '630 disclosed method of combination of PSI-7977 with the following for treatment of HCV: PSI-938 (See **Exhibit E** at running page 428 at para 17 and running pages 459-486 at paras 100-113), TMC-435 (See **Exhibit E**at paras 17, 31, 47, 100-113, 146), BMS-790052 also known as daclatasvir (See **Exhibit E** at paras 17, 30, 49, 100-114, 151, 272), BMA-650032 also known as asunapravir (See **Exhibit E** at paras 17, 100-113), as well as Sofosbuvir in combination with BMS-790052 and BMA-650032(See **Exhibit E** atpara 17), GS-5885 (See **Exhibit E** at paras 28, 34, 50, 102-106, 108-113, 280), Ribavarin (See **Exhibit E** atpara 54), Ritonavir (See **Exhibit E** atpara 103-104), **GS 9451** (See **Exhibit E** at paras 278-279).

57. WO '630 also discloses preferred form of the ingredients of the dosage. It discloses, "*More preferably, the dosage form is a solid dosage form in which at least one of the DAAs is in an amorphous form, or highly preferably molecularly dispersed, in a matrix which comprises a pharmaceutically acceptable water-soluble polymer and a pharmaceutically acceptable surfactant. The other DAAs can also be in an amorphous form or molecularly dispersed in the matrix, or formulated in different form(s) (e.g., in a crystalline form).*" (See **Exhibit E** atpara 162 at running page 526).

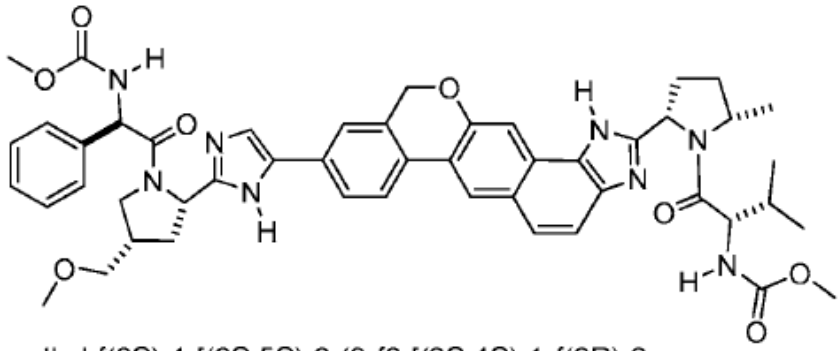
58. Therefore, a POSITA on reading WO '630 would be taught that known Direct acting anti-virals (DAAs), including Sofosbuvir could be combined with other known HCV inhibitors. Further, on reading WO '630, a POSITA would also be informed that one of the DAAs in the dosage could be in amorphous form and the other DAA could be in crystalline form.

59. Therefore, a POSITA working on HCV formulations, on reading **WO '578, WO '630** and **WO '432**, would be motivated to develop pharmaceutical formulations of an HCV protease inhibitor in a solid dispersion using various polymers including copovidone and wherein the ratio of HCV protease inhibitor to that of excipients by weight would be 1:1. Further, POSITA would also be motivated to use or work on the HCV protease inhibitor with Copovidone, Microcrystalline Cellulose (MCC), Sodium Croscarmellose and Magnesium Stearate, as well as a known polymerase inhibitor like PSI-7977 (Sofosbuvir). Further, the POSITA would also be motivated to make a composition wherein one HCV inhibitor may be in amorphous form and the other may be in crystalline form.

**iii. That the composition comprising Velpatasvir and Sofosbuvir was known in the art**

60. Without prejudice to the ground of lack of novelty, raised by the Opponent above, the Opponent draws attention to WO '029.

61. It is iterated that WO '029 discloses Velpatastvir at Example PY (See **Exhibit A** at running page 245). The structure of Example PY is reproduced for convenience:



methyl {(2S)-1-[(2S,5S)-2-(9-{2-[(2S,4S)-1-{(2R)-2-[(methoxycarbonyl)amino]-2-phenylacetyl}-4-(methoxymethyl)pyrrolidin-2-yl]-1H-imidazol-5-yl}-1,11-dihydroisochromeno[4',3':6,7]naphtho[1,2-d]imidazol-2-yl)-5-methylpyrrolidin-1-yl]-3-methyl-1-oxobutan-2-yl}carbamate

Formula I

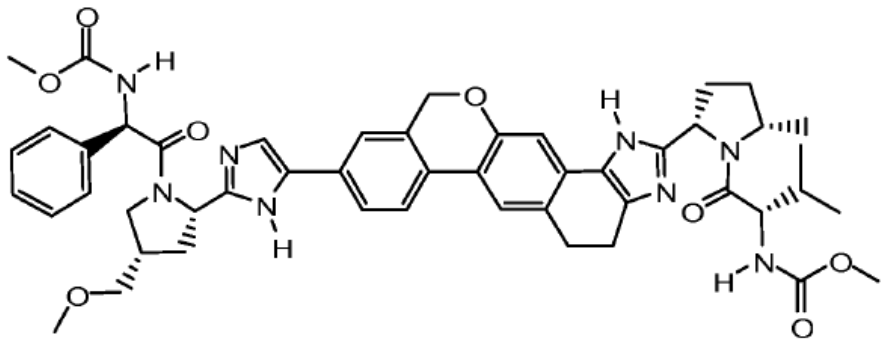
62. Attention is again drawn to claim 31 of WO '029, which claims, "*A pharmaceutical composition comprising a compound as in claims 1-24, at*

*least one nucleoside or nucleotide inhibitor of HCV NS5B polymerase, and at least one pharmaceutically acceptable carrier*".

63. Further WO '029 relies on the ***Handbook of Pharmaceutical Excipients (1986)***at **Exhibit B**. A review of the *Handbook of Pharmaceutical Excipients* (**Exhibit B**) reveals that excipients including microcrystalline cellulose (see **Exhibit B** running page 313-316), croscarmellose sodium (see **Exhibit B** running pages 317-319), and magnesium stearate (See **Exhibit B** at running pages 320-323).

64. Further, WO '029 also indicates that the *tablets may be excipients such as* ***croscarmellose sodium***, ***microcrystalline cellulose*** *and* ***magnesium stearate.*** (See **Exhibit A** at running page 55 at last line, and running page 56 at lines 1-6).

65. Further, claim 33 of WO '029 claims, " *The pharmaceutical composition of claim 31 or 32, wherein the compound is of the formula*



".

66. Claim 34 of WO '029 claims, "*The pharmaceutical composition of any one of claims 31-33, wherein the nucleoside or nucleotide inhibitor of HCV NS5B polymerase is Sofosbuvir*".

67. Therefore, compound of claim 34, is a composition comprising the compound of formula I (as in claim 33), pharmaceutically acceptable carrier such as microcrystalline cellulose, croscarmellose sodium and magnesium stearate, and Sofosbuvir as the inhibitor of NS5B polymerase.

**SUMMARY**

68. A POSITA working on combination of HCV drugs on reading **WO '432**, **WO '578**, **WO '630** and **WO '029** would be motivated to combine known HCV inhibitors such as Velpatasvir and Sofosbuvir, such that one of them is in amorphous form and the other is in crystalline form. Further, on the date of priority of the Present Application, it was common general knowledge that microcrystalline cellulose, croscarmellose sodium and magnesium stearate may be used as pharmaceutically acceptable carriers.

69. Based on the teachings of the above-mentioned prior art documents, it would be obvious for a POSITA to arrive at the compounds claimed in claims 1-10 of the Present Application. Claims 1-10 of the Present Application must therefore be rejected for being obvious.

## III. That claims 1-10 of the Present Application ought to be rejected under Section 25(1)(f), as they are not an invention within the meaning of the Patents Act

70. Section 25(1)(f) of the Patents Act allows opposition to grant of patent on the ground of the claimed invention not being an invention within the meaning of the Patents Act, 1970. Section 25(1)(f) reads as follows:

> "*(1) Where an application for a patent has been published but a patent has not been granted, any person may, in writing, represent by way of opposition to the Controller against the grant of patent on the ground—*
>
> ..
>
> *(f) that the subject of any claim of the complete specification is not an invention within the meaning of this Act, or is not patentable under this Act.*"

**That claims 1-10 of the Present Application fail under Section 3(e) of the Patents Act, 1970**

71. It is submitted that claims 1-10 of the Present Application should be rejected on the basis of Section 3(e), as the claimed compounds are mere admixtures resulting in mere aggregation of properties.

72. Section 3(e) of the Patents Act, 1970 provides that," *a substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance.*" An applicant claiming a combination of compounds is required to show and enhanced additive effect or synergism in the complete specification itself. It is a settled principle that, "*The question of efficacy and or synergism are matters of scientific facts which are required to be embodied in the specification so that the said characteristics are apparent from the specification.*" (See order of the Asst. Controller of Patents & Designs in patent application no. 314/MUM/2008, at lines 3-5 at running page 593 annexed hereto as **Exhibit F**).

73. Further merely providing the composition of each of the ingredients in terms of weight does not discharge the burden on the Applicant to show synergism. The Asst. Controller of Patents & Designs, while rejecting application no. 3725/CHENP/2006, on grounds of Section 3(e) noted, "*Applicant doesn't provide any supportive experimental data or comparative examples highlighting the surprising and or synergistic effect of the claimed formulation over the prior art compositions. Instead examples 1, 2 and 3 provide only the amount of individual components in grams.*" (See the order of the Controller in 327/CHENP/2006, hereto annexed as **Exhibit G** at running page 600, Para 8)

74. The Present Application claims a pharmaceutical composition *inter alia* comprising Velpatasvir and Sofosbuvir.

**WO2008121634** (Published: 09.08.2008)

75. It is submitted that Sofosbuvir was disclosed in patent publication on WO2008121634 in the patent application titled, "*Nucleoside Phosphoramidate Prodrugs*" and published on 09.08.2008 (hereinafter

referred to as "WO '634" and annexed hereto as **Exhibit H**). WO '634 disclosed Nucleoside Phosphoramidate prodrugs, including Sofosbuvir to be used for treatment of viral diseases such as Hepatitis C.

76. In fact, the Applicant in the Present Application itself has admitted that, "*Sofosbuvir has previously been described in U.S. Pat. No.:7,964,580 and U.S. Pat. Pub. Nos.: 2010/0016251, 2010/0298257, 2011/0251152 and 2012/0107278. The Sofosbuvir is provided as substantially crystalline in the pharmaceutical compositions described herein. Examples of preparing crystalline forms of Sofosbuvir are disclosed in U.S. Pat. Pub. Nos.: 2010/0298257 and 2011/0251152, both of which are incorporated by reference. Crystalline forms, Form 1-6 of Sofosbuvir are described in U.S. Pat. Pub. Nos.: 2010/0298257 and 2011/0251152, both of which are incorporated by reference. Forms 1-6 of Sofosbuvir have the following characteristic X-ray powder diffraction (XRPD) pattern 29-values measured according to the XRPD methods disclosed therein…*" (See complete specification of the Present Application at para 51, at internal page 10). Therefore, it is an admitted case the crystalline form of Sofosbuvir was known.

77. Further, the Applicant has admitted that Velpatasvir, represented as Compound I in the Present Application was known in the art. The complete specification of the Present Application states, "*Compound I has previously been described (see, for example, WO 2013/075029) and can be prepared by methods described therein.*" (See complete specification of the Present Application at para 33, at internal page 6).

78. It is submitted that the complete specification of the Present Application fails to provide any data in terms of efficacy or synergistic effect of the combination of the known HCV inhibitors, i.e. Sofosbuvir and Velpatasvir. At the most, the complete specification provides the percentage weight of each of the ingredients in the pharmaceutical composition (See complete specification of Present Application at internal page 36 at Table 1, internal page 39 at Table 2, internal page 40 at Table 3, internal page 41 at Table 4

and 5). Further, Applicant's submission that "*The increase in exposure suggests that the bioavailability of Compound I administered as part of the Sofosbuvir/Compound I FDC is improved relative to Compound I as a single agent tablet*", does not discharge the burden to show that the claimed invention has a synergistic effect. (See internal page 44 of the Present Application at para 139, lines 7-9)

79. Therefore, claims 1-10 of the Present Application must be rejected under Section 3(e) of the Patents Act.

**IV. That claims 1-10 of the Present Application do not satisfy the test of section 3(d) and therefore are objected to under section 25(1) (f)**

80. Without prejudice to other grounds raised herein, it is submitted that claims 1-3 fail under section 3(d) of the Patents Act.

81. Section 3(d) of the Patents Act states:

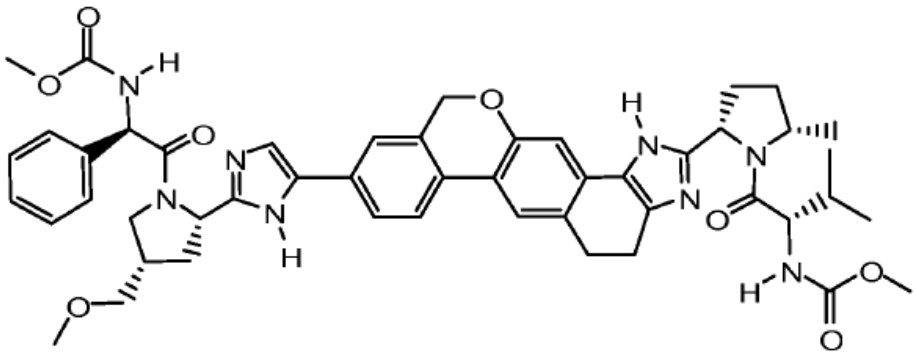
> "*the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.*
>
> *Explanation-For the purposes of this clause, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substance shall be considered to be the same substance, unless they differ significantly in properties with regard to efficacy*."

82. Section 3(d) of the Patents Act was amended in 2005 to prevent patents on modification of known substances. The statute requires product claim relating to a known substance, to satisfy the requirement of S. 3(d). It is an established position of law that S. 3(d) has to be satisfied independently of Section 2(1)(j) and S. 2(1)(ja) [see *Novartis AG versus Union of India and Others* (2013) 6 SCC 1]. This requirement under S. 3(d) is to be satisfied by

the Applicant by showing efficacy (see *Novartis AG versus Union of India and Others* 2007 4 MLJ 1153, para 13). In case of pharmaceutical products this efficacy would have to be shown in terms of therapeutic efficacy. Further, such data has to be provided by the Applicant in the complete specification (see the order of the Hon'ble IPAB, Novartis AG versus Union of India, MIPR 2009 (2) 0345, para 9(xvii)).

83. Without prejudice to the ground of lack of novelty, obviousness and Section 3(e), raised by the Opponent above, the Opponent draws attention to the complete specification of the Present Application.

84. The Applicant itself has admitted that Compound I viz.



has been disclosed in WO 2013/075029(see complete specification of the Present Application at para 4 at internal page 1). It also admits that Sofosbuvir has been described in US Pat. No. 7, 964, 580 and US.Pub.Nos. 2010/0016251, 2010/0298257, 2011/0251152, 2012/0107278. (See complete specification of the Present Application at para 51 internal page 10).

85. A reading of the claims of the Present Application clearly indicates that the claimed compounds are mere combination of Compound I with Sofosbuvir. Section 3(d) identifies a *combination* as a derivative of a known substance. By failing to indicate how claimed compounds of the Present Application have an improved therapeutic efficacy over these known compounds, it has failed to fulfil the requirement under Section 3(d).

86. It needs to be pointed out that the increased therapeutic efficacy has to be demonstrated by the Applicant in the Specification itself. Admittedly that is not event attempted forget demonstrating it.

87. Therefore, claims 1-80 must be rejected as they fail to comply with the standards laid down in S. 3(d).

**V. That claims 1- 10 of the Present Application must be rejected as the complete specification does not sufficiently and clearly describe the working the invention**

88. It is submitted that the Present Application does not sufficiently and clearly describe the invention claimed. Further the claims are not appropriately supported by the specification of the Present Application. Hence, without prejudice to the grounds raised in this representation, the Opponent invokes Section 25(1) (g).

89. It is submitted that the Present Application has defined various terms very broadly, putting them in a percentage range, and therefore, not disclosing the best method of performing the invention. The terms "substantially amorphous" and "substantially crystalline" have been defined as a range of amorphous or crystalline behaviour. In fact, claim 1 claims a composition comprising a "substantially amorphous" Compound I and "substantially crystalline" Sofosbuvir. Such overbroad identification of the nature of Compound I or Sofosbuvir renders the claim vague and the specification insufficient in supporting the same.

90. Further, the complete specification while identifying the amount of each of the ingredients of the composition, gives a percentage range by weight (See complete specification, "*Pharamceutical Dosage Forms*" at internal page 15-18). For instance, the complete specification states that, "*In one embodiment, the tablet comprises a) about 30 to about 70% w/w of Sofosbuvir and b) about 1 to about 45% w/w of the solid dispersion comprising Compound I...*" (See complete specification of the Present Application at para 74 at internal page 16).

91. On the other hand, the claims 1-10 claim particular range of weight for each of the ingredients. For example, claim 1 claims a composition with Sofosbuvir from about 35% to 45% by w/w. The Applicant has failed to indicate any advantage of the claimed percentage weight over those broadly disclosed range in the complete specification.

**VI. That the Applicant failed to disclose information required by Section 8, hence the opposition is raised under Section 25(1)(h)**

92. Section 25(1) (h) of the Patents Act provides a ground for opposition if the patent applicant has not furnished information required under Section 8 of the Patents Act, within the time prescribed by law. Without prejudice to other grounds raised herein, the Present Application should be rejected because the Patent Applicant has deliberately not complied with the mandatory requirements of Section 8 of the Patents Act.

93. Section 8 of the Patents Act read with rule 12(1) of the Patents Rules requires, *inter alia*, a patent applicant, who is prosecuting, either alone or jointly with any other person, an application for a patent in any country outside India in respect of the same or substantially the same invention, to file a statement setting out the particulars of such application (Form -3) within six months of the date of filing of such application in India.

94. On 29.12.2017, the Applicant filed Form-3 giving details of the status of corresponding applications (of the Present Application) in other jurisdictions. This form indicates that apart from India, the corresponding application has been filed in Argentina, Australia, Brazil, Bahamas, Bolivia, Canada, People's Republic of China, Eurasean Patent Organization, European Patent Convention, Gulf Cooperation Council, Hong Kong, Israel, Japan, Republic of Korea, Macau, Mexico, New Zealand, Pakistan, Paraguay, Singapore, Taiwan, United States of America, Uruguay and Venezuela.

95. It is submitted that the Applicant has made amendments to the claims in applications covering similar invention filed in other jurisdictions as a result of Patent Office objections. However the Applicant chosen to not submit the details of the Patent Office objections.

96. Given that complete information related to the corresponding applications in other jurisdictions has not been given, ground for opposition under S. 25(1) (h) of the Patents Act is raised. The Opponent also requests the Controller to direct the Applicant to submit translated copies of the opposition proceedings and office actions in these jurisdictions to facilitate examination of the Present Application.

**PRAYER FOR RELIEF**

In view of the above said references Opponent prays as follows:

a) To be heard and be allowed to lead evidence (documentary and oral) before any order is passed;

b) To reject the claims of 201627008488 filed by Gilead Pharmasset LLC *intoto*;

c) To allow the Opponent to file further documents as evidence if necessary to support the averments;

d) To allow amendment of the opposition as and when the need may arise;

e) To allow the Opponent to make further submissions in case the Applicant amends the claims;

f) For costs in this matter;

g) For any further and other relief in the facts and circumstances that may be granted in favour of the Opponent in the interest of justice.

Dated this 9th day of JULY, 2018

OPPONENT

**To**

**The Controller,**

**The Patent Office Branch**

**MUMBAI**