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(71) Applicant: **ILYLT, LLC** [US/US]; 6591 South Cottonwood Street, Murray, Utah 84107 (US).

(72) Inventor: **JENN, Dennis**; 1878 Portabello Road, South Jordan, Utah 80495 (US).

(74) Agent: **GUYNN, John M.**; Workman Nydegger, 60 East South Temple, Suite 1000, Salt Lake City, Utah 84111 (US).

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(54) Title: COMPOSITIONS FOR ENHANCING SEXUAL PLEASURE WITH REDUCED PHARMACEUTICAL LOAD OF PDE5 INHIBITOR

(57) **Abstract:** A composition for increasing sexual pleasure in an adult human includes: a dosage form selected from capsules, tablets, oral drops, infused edibles, infused food preparations, infused drink preparations, massage oils, lotions, gels, creams, lubricants, patches, and suppositories, the dosage form containing: a quantity of a PDE5 inhibitor that is no greater than 50% of a full prescription quantity or dose of the PDE5 inhibitor for an adult male; and a quantity of a cannabinoid component sufficient to amplify the effect of the PDE5 inhibitor to at least 80% of the effect of the full prescription quantity or dose for an adult male, wherein the PDE5 inhibitor and the cannabinoid component are effective in increasing sexual pleasure in the adult human in need thereof, including at least one of increased blood flow to erectile tissue, increased sexual desire, increased sexual arousal, increased sexual sensitivity, or increased strength of orgasm.

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC - INV. A61K 31/05, A61K 31/015, A61K 31/03 (2024.01)
ADD. A61K 31/045 (2024.01)

CPC - INV. A61K 31/05, A61K 31/015, A61K 31/03
ADD. A61K 31/045

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 10,555,927 B2 (ILYSM, LLC) 11 February 2020 (11.02.2020) Entire document, especially Abstract, col 2 ln 56-59; col 5 ln 1-9; col 6 ln 9-17; col 8 ln 12-34; col 33-67; col 10 ln 1-9; claim 11; claim 12	1-3, 15-16
L	"How and When to Take Sildenafil." NHS, NHS, 2 Mar. 2022, www.nhs.uk/medicines/sildenafil-viagra/how-and-when-to-take-sildenafil/.	1-3, 15-16
A	US 9,586,937 B2 (Ironwood Pharmaceuticals, Inc.) 7 March 2017 (07.03.2017) Entire document	1-3, 15-16
A	US 2020/0323773 A1 (POVIVA Corp.) 15 October 2020 (15.10.2020) Entire document	1-3, 15-16
A	US 2022/0008330 A1 (NOVA Thin Film Pharmaceuticals LLC) 13 January 2022 (13.01.2022) Entire document	1-3, 15-16
A	WO 2022/027122 A1 (Ramade & CIA Holding Corp.) 10 February 2022 (10.02.2022) Entire document	1-3, 15-16

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"D" document cited by the applicant in the international application
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-8300	Authorized officer Kari Rodriquez Telephone No. PCT Helpdesk: 571-272-4300

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 24/33226

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☒ Claims Nos.: 4-14, 17-20
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.