

Singapore's Input in Response to Circular C. 9141 (Part 1)

Pursuant to the decision of the thirty-fourth session of the Standing Committee on the Law of Patents ("SCP"), which was held in Geneva in a hybrid format from September 26 to 30, 2022, Member States and Regional Patent Offices were invited to send to the Secretariat any additional input for the preparation of the following documents:

- i. a draft reference document on the exception regarding the use of articles on foreign vessels, aircrafts and land vehicles;
- ii. a further study on the sufficiency of disclosure (Part II), relating to inventions having an experimental nature in unpredictable art, such as chemistry and biotechnology, and any other areas that deserve special attention, as proposed in document SCP/31/8 Rev;
- iii. a document compiling information relating to the expedited examination programs of IP offices, including information on Prioritized Examination of COVID-19 related patent applications; and
- iv. a compilation on how jurisdictions around the world address the issue of artificial intelligence (AI) inventorship through jurisprudence, legislation and practice.

Accordingly, Singapore has prepared the following input.

i. EXCEPTION REGARDING THE USE OF ARTICLES ON FOREIGN VESSELS, AIRCRAFTS AND LAND VEHICLES

Singapore provides the exemption of patent rights for foreign vessels (namely aircraft, hovercraft, vehicles and ships) which have temporarily or accidentally entered or are crossing Singapore. In addition, such exemption is also catered for importation of parts and accessories for the use and installation in the repair of an exempted aircraft. The relevant provisions may be found in section 66 of the Singapore Patents Act 1994 ("SPA") (see **Annex I**). In particular, section 66(2)(d), (e) and (f) of the SPA state as follows:

Meaning of infringement

66.— (1) ...

(2) An act which, apart from this subsection, would constitute an infringement of a patent for an invention is not an infringement of a patent if —

...

(d) it consists of the use of a product or process in the body or operation of a relevant aircraft, hovercraft or vehicle which has temporarily or accidentally entered or is crossing Singapore (including the airspace above it and its territorial waters) or the use of accessories for such a relevant aircraft, hovercraft or vehicle;

(e) it consists of the use, exclusively for the needs of a relevant ship, of a product or process in the body of the ship or in its machinery, tackle, apparatus or other accessories, in a case where the ship has temporarily or accidentally entered the territorial waters of Singapore;

Restricted

(f) it consists of the use of an exempted aircraft which has lawfully entered or is lawfully crossing Singapore as mentioned in paragraph (d) or of the importation into Singapore, or the use or storage, of any part or accessory for that aircraft;

Section 66(7) of the SPA further defines exempted aircraft, relevant ship, aircraft, hovercraft or vehicle as follows –

(7) In this section –

...

“exempted aircraft” means an aircraft to which section 30 of the Air Navigation Act 1966 applies;

“relevant ship” and “relevant aircraft, hovercraft or vehicle” mean, respectively, a ship and an aircraft, a hovercraft or a vehicle registered in, or belonging to, any country, other than Singapore, which is –

(a) a party to the Paris Convention; or

(b) a member of the World Trade Organisation.

Section 30(3) of the Air Navigation Act 1966, setting out the aircraft to which section 30 of the Air Navigation Act 1966 (ANA) applies is reproduced below for ease of reference. The full provision can be found in the **Annex II**.

Exemption of aircraft and parts thereof from seizure on patent claims

30.—...

(3) This section applies to an aircraft, other than an aircraft used in military, customs or police service, registered in any country or territory in the case of which there is for the time being in force an order made by the Minister, with a view to the fulfilment of the provisions of the Chicago Convention to which this section relates, that the benefits of those provisions apply to that country or territory, and to any other aircraft that the Minister may, by order, specify.

ii. SUFFICIENCY OF DISCLOSURE

Singapore has provided information on our national laws and practices in relation to the requirement of sufficiency of disclosure in the earlier study on sufficiency of disclosure prepared by the Secretariat (document SCP/22/4). The document was discussed at the twenty-second session of the SCP, held in Geneva from July 27 to 31, 2015.

Singapore has also provided additional input for the preparation of a further study on the sufficiency of disclosure (document SCP/34/5). This included an update to the Examination Guidelines for Patent Applications at IPOS (“Guidelines”) on sufficiency of disclosure and discussion on the sufficiency of disclosure practice in respect of inorganic and organic chemistry (including pharmaceuticals), microorganisms and artificial intelligence, where each deserves special consideration on top of applying general principles. There has been no new development since the last update.

Restricted

Pertaining to an invention which is unpredictable in nature, the Guidelines states that more details may be required in the specification. The specification must be sufficient to allow the invention to be performed without undue burden, having regard to the fact that the specification should explain to the skilled person how the invention can be performed. The question whether a burden is undue must be sensitive to the nature of the invention, the abilities of the skilled person and the art in which the invention has been made. For more details on this general principle, please refer to our earlier submissions.

Insufficiency will not arise merely on the basis that some difficulty is experienced in working the invention. However, if the invention is not repeatable or if success is unpredictable, the specification may be insufficient. It can be assumed that the skilled person should be trying to make the invention work (*Kirin-Amgen Inc v Hoechst Marion Roussel* [2005] RPC 9). The skilled person would quickly realise that one or some methods would work based on the specifications while other methods may fail. However, the specification is not considered to be insufficient for the claim which is expressed in terms broad enough to include both the working and failed methods.

Further information can be found in para. 5.28 and 5.132 of the Guidelines (updated Jun 2022) (<https://go.gov.sg/patentexaminationguide>).

iii. **EXPEDITED EXAMINATION PROGRAMMES**

The Intellectual Property Office of Singapore (IPOS) offers several options for applicants to apply for accelerated treatment of their patent applications. Information on such expedited examination programmes are as follows, with more details on our [website](#).

(a) Patent Prosecution Highway (PPH)

IPOS is a participating office of the Global Patent Prosecution Highway (GPPH) programme. This allows applicants to request for accelerated examination of an IPOS patent application by relying on the national or PCT work products established by other GPPH participating offices.

Bilaterally, IPOS has also PPH pilot programmes with the National Institute of Industry Property of Brazil (INPI), the China National Intellectual Property Administration (CNIPA), the Mexican Institute of Industrial Property (IMPI) and the European Patent Office (EPO).

(b) ASEAN Patent Examination Co-operation (ASPEC)

ASPEC is a regional patent work-sharing programme launched in 2009 among the nine participating ASEAN IP Offices of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

This complimentary programme is useful for applicants keen to file multiple patent applications for the same invention in the ASEAN region. Applicants may use the written opinions¹ or search and **examination** reports issued by a participating IP Office to accelerate the patenting process in any one of the other participating IP Offices.

¹ For ASPEC, a Written Opinion is an acceptable search & examination result for all participating IP Offices except the IP Office of Thailand.

Restricted

Two new ASPEC pilot programmes were further introduced in August 2019 to provide added benefits for applicants:

(i) ASPEC Acceleration for Industry 4.0 Infrastructure and Manufacturing (ASPEC AIM)

- Benefits to applicant: A shorter and committed turnaround time of 6 months to receive the first office action for an ASPEC request filed for an Industry 4.0 patent application.
- Duration: Initial pilot period of 2 years starting from 27 August 2019 which was extended for 2 years till 26 August 2023.
- Cap: Up to 50 eligible applications per year, shared between the participating IP Offices.

(ii) Patent Cooperation Treaty ASPEC (PCT-ASPEC)

- Benefits to applicant: An additional choice of relying on Patent Cooperation Treaty (PCT) reports issued from an ASEAN International Searching Authority/ International Preliminary Examining Authority (ISA/IPEA) for acceleration in a participating IP Office.
- Duration: Initial pilot period of 3 years starting from 27 August 2019 which was extended for 3 years till 26 August 2025.
- Cap: Up to 100 eligible applications per year, shared between the participating IP Offices.

Applicants are allowed to submit both the PCT-ASPEC and ASPEC AIM requests simultaneously at the second participating IP Office.

Qualifying Conditions for ASPEC are:

- Applicants to have corresponding patent applications filed at the first and second participating IP Offices.
- The Request for ASPEC must be supported by the search and examination documents of the corresponding application from the first IP Office.
- All claims filed in the second IP Office must sufficiently correspond to allowable/patentable claims referred to in the search and examination documents from the first IP Office.
- To qualify for PCT-ASPEC, the international preliminary examination report or written opinion to be relied upon for examination should be issued by an ASEAN ISA/IPEA as the first IP Office.
- To qualify for ASPEC AIM, the patent application must be classified with an eligible IPC code relating to an Industry 4.0 invention.
- The Request for PCT-ASPEC and Request for ASPEC AIM is made within the cap limits.

(c) Collaborative Search and Examination (CS&E)

A first in ASEAN, IPOS has established a Collaborative Search and Examination (CS&E) pilot programme with the Intellectual Property Office of Viet Nam (IP Viet Nam) that will provide innovators with enhanced prior art search and examination results based on the combined expertise from both IP Offices. It is designed to speed up the patent process for those interested to obtain patent protection in both countries.

Restricted

The CS&E programme is complimentary during the pilot duration from 1 March 2023 to 28 February 2025. Applicants will benefit from an accelerated first office action, i.e., the CS&E report will be issued within 10 months from the date of receipt of the Request for CS&E.

The number of CS&E requests will be capped at 20 requests per year for an initial duration of two years. This cap is shared between IPOS and IP Viet Nam, with a further cap of two requests per month and a restriction of two requests per entity (individual or corporate) per month. Unutilised number will be rolled over to the following month, subject to a maximum cap of four per month.

Qualifying Conditions for the CS&E programme are:

- Application must be first filed in Singapore or Viet Nam, i.e., no priority claim and not a divisional application.
- The Request for the Grant of a Patent, Request for Search and Examination Report and Request for CS&E are filed on the same day.
- Application should contain 20 or fewer claims, including 3 or fewer independent claims.
- Applicant must respond within 2 weeks from the receipt of formalities examination adverse report (if issued).
- The Request for CS&E is made within the cap limits.

(d) SG IP FAST

IPOS launched the SG IP FAST programme in May 2020 to support the acceleration of patent applications in all technology fields.

IPOS first launched a 12 Months File-to-Grant (12MG) programme in August 2014 to offer patent applicants the possibility of obtaining a grant within 12 months from the filing of the application. Subsequently, IPOS added the FinTech Fast Track (FTFT) and Accelerated Initiative for Artificial Intelligence (AI²) programmes in 2018 and 2019, respectively, in recognition of Singapore's shift towards a digital economy and to support innovators and enterprises that are looking to bring their FinTech and AI products faster to the market. In assessing the impact of the various national acceleration programmes against the backdrop of continued digital and technological advancements globally, IPOS decided to consolidate the 12MG, FTFT and AI² programmes and launched the SG IP FAST programme.

As a result of positive demand and usage in the first phase of the pilot, SG IP FAST was extended for a second phase from 30 April 2022 to 30 April 2024. The cap was also doubled to 10 patent requests per month, with an additional cap of 2 patent requests per entity (individual or corporate) to allow a greater pool of applicants to benefit from the programme². SG IP FAST remains complimentary for applicants.

Under SG IP FAST, an applicant may receive the grant of an eligible patent application in as fast as six months, subject to the complexity of the patent application. In recognition that inventions may carry with them IP beyond patents, SG IP FAST also allows related trade mark applications to be registered in as fast as three months, subject to the complexity of the trade

² There is currently no cap on the number of requests for acceleration of trade mark and registered design applications under SG IP FAST.

Restricted

mark application while related registered design applications can be registered in as fast as one month.

Qualifying Conditions for SG IP FAST are:

- Application must be first filed in Singapore, i.e., no priority claim. The Request for the Grant of a Patent, and Request for Search and Examination Report must be filed on the same day.
- Application should contain 20 or fewer claims.
- Applicant must respond within 2 weeks from the receipt of formalities examination adverse report (if issued).
- Applicant must respond within 2 months from the date of receipt of written opinion.
- Patent applications will be accelerated for up to two office actions. After the second written opinion, the processing of the patent application will no longer be accelerated.
- The applicant cannot request for an Extension of Time for any matter during the patent application process.
- The Request for SG IP FAST is made within the cap limits.

iv. ARTIFICIAL INTELLIGENCE (AI) INVENTORSHIP

Section 2(1) of the SPA defines “inventor”, in relation to an invention, to mean “the *actual deviser* of the invention” and “joint inventor” is to be construed accordingly.

Section 24(1) and (2) of the SPA goes on to state that -

Mention of inventor

24.—(1) *The inventor or joint inventors of an invention have a right to be mentioned as such in any patent granted for the invention and also have a right to be so mentioned if possible in any published application for a patent for the invention and, if not so mentioned, a right to be so mentioned in accordance with the rules in a prescribed document.*

(2) Unless an applicant for a patent has already given the Registry the information mentioned in this subsection, the applicant for a patent must, within the prescribed period, file with the Registry a statement —

(a) identifying the person or persons whom the applicant believes to be the inventor or inventors; and

(b) where the applicant is not the sole inventor or the applicants are not the joint inventors, indicating the derivation of the applicant’s or the applicants’ right to be granted the patent,

and, if the applicant fails to do so, the application is treated as having been abandoned.

In *Energenics Pte Ltd v Musse Singapore Pte Ltd* [2013] SGHCR 21, the phrase “actual deviser” has been interpreted by the SG courts to mean “the *natural person* who came up with the inventive concept” (emphasis added). The SG courts further interpreted that inventorship is

Restricted

a *personal right* which is unique to the inventor and cannot be *assigned* the way proprietary interests can.

Notwithstanding the above, the protection of AI-generated inventions has not come before the SG courts.

Annex I – Section 66 of the Patents Act

Meaning of infringement

66.—(1) Subject to the provisions of this Act, a person infringes a patent for an invention if, but only if, while the patent is in force, the person does any of the following things in Singapore in relation to the invention without the consent of the proprietor of the patent:

- (a) where the invention is a product, the person makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise;
- (b) where the invention is a process, the person uses the process or the person offers it for use in Singapore when the person knows, or it is obvious to a reasonable person in the circumstances, that its use without the consent of the proprietor would be an infringement of the patent;
- (c) where the invention is a process, the person disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.

(2) An act which, apart from this subsection, would constitute an infringement of a patent for an invention is not an infringement of a patent if —

- (a) it is done privately and for purposes which are not commercial;
- (b) it is done for experimental purposes relating to the subject matter of the invention;
- (c) it consists of the extemporaneous preparation of a medicine for an individual in accordance with a prescription given by a registered medical or dental practitioner or consists of dealing with a medicine so prepared;
- (d) it consists of the use of a product or process in the body or operation of a relevant aircraft, hovercraft or vehicle which has temporarily or accidentally entered or is crossing Singapore (including the airspace above it and its territorial waters) or the use of accessories for such a relevant aircraft, hovercraft or vehicle;
- (e) it consists of the use, exclusively for the needs of a relevant ship, of a product or process in the body of the ship or in its machinery, tackle, apparatus or other accessories, in a case where the ship has temporarily or accidentally entered the territorial waters of Singapore;
- (f) it consists of the use of an exempted aircraft which has lawfully entered or is lawfully crossing Singapore as mentioned in paragraph (d) or of the importation into Singapore, or the use or storage, of any part or accessory for that aircraft;
- (g) subject to subsections (3) and (6), it consists of the import, use or disposal of, or the offer to dispose of, any patented product or any product obtained by means of a patented process or to which a patented process has been applied, which is produced by or with the consent (conditional or otherwise) of the proprietor of the patent or any person licensed by the proprietor, and for this purpose “patent” includes a patent granted in any country outside Singapore in respect of the same or substantially the same invention as that for which a patent is granted under this Act and “patented product”, “patented process” and “licensed” are to be construed accordingly;
- (h) it consists of the doing of any thing set out in subsection (1) in relation to the subject matter of the patent to support any application for marketing approval for a

Restricted

pharmaceutical product, provided that any thing produced to support the application is not —

- (i) made, used or sold in Singapore; or
- (ii) exported outside Singapore,

other than for purposes related to meeting the requirements for marketing approval for that pharmaceutical product; or

- (i) subject to subsection (6), it consists of the import, disposal or offer to dispose of a patented pharmaceutical product for use by or on a specific patient in Singapore, or the use of that product by or on that patient, where —
 - (i) that product is required for use by or on that patient;
 - (ii) the relevant authority has granted approval specifically for the import of that product for use by or on that patient; and
 - (iii) that product was produced by or with the consent (conditional or otherwise) of the proprietor of the patent or any person licensed by the proprietor (and for this purpose “patent” includes a patent granted in any country outside Singapore in respect of the same or substantially the same product and “licensed” is to be construed accordingly).

(3) Subsection (2)(g) does not apply to the import of any patented pharmaceutical product by any person (called in this subsection and subsection (4) the importer) if —

- (a) the product has not previously been sold or distributed in Singapore by or with the consent (conditional or otherwise) of the proprietor of the patent or any person licensed by the proprietor of the patent to sell or distribute the product in Singapore;
- (b) the import of the product by the importer would result in the product being distributed in breach of a contract between —
 - (i) the proprietor of the patent; and
 - (ii) any person licensed by the proprietor of the patent to distribute the product outside Singapore; and
- (c) the importer has actual or constructive knowledge of the matters referred to in paragraph (b).

(4) For the purposes of subsection (3), where the importer has received a written notice containing the prescribed particulars, the importer is deemed to have constructive knowledge of the matters referred to in subsection (3)(b).

(5) To avoid doubt, in subsection (3), “patent” does not include a patent granted in any country outside Singapore in respect of the same or substantially the same product and “licensed” is to be construed accordingly.

(6) Subsection (2)(g) and (i) does not apply to the import or sale of, or the offer to sell, any relevant health product produced for export to any country, other than Singapore, which is an eligible importing member of the World Trade Organisation.

Restricted

(7) In this section —

“eligible importing member”, in relation to the World Trade Organisation, means a member of the World Trade Organisation which —

- (a) is a least-developed country; or
- (b) has given the Council for TRIPS the notification referred to in —
 - (i) paragraph 1(b) of the Doha Declaration Implementation Decision; or
 - (ii) paragraph 1(b) of the Annex to the TRIPS Agreement;

“exempted aircraft” means an aircraft to which section 30 of the Air Navigation Act 1966 applies;

“relevant ship” and “relevant aircraft, hovercraft or vehicle” mean, respectively, a ship and an aircraft, a hovercraft or a vehicle registered in, or belonging to, any country, other than Singapore, which is —

- (a) a party to the Paris Convention; or
- (b) a member of the World Trade Organisation.

Annex II - Section 30 of the Air Navigation Act 1966

Exemption of aircraft and parts thereof from seizure on patent claims

(1) Subject to subsection (2), the importation into, and storage in, Singapore of spare parts and spare equipment for an aircraft to which this section applies and the use and installation of the parts and spare equipment in the repair of such an aircraft does not entail any seizure or detention of the aircraft or of the spare parts or spare equipment or any proceedings being brought against the owner or operator of the aircraft or the owner of the spare parts or spare equipment or any other interference with the aircraft by or on behalf of any person in Singapore on the ground that the spare parts or spare equipment or their installation are or is an infringement of any patent, design or model.

(2) Subsection (1) does not apply in relation to any spare parts or spare equipment which are sold or distributed in Singapore or are exported from Singapore for sale or distribution.

(3) This section applies to an aircraft, other than an aircraft used in military, customs or police service, registered in any country or territory in the case of which there is for the time being in force an order made by the Minister, with a view to the fulfilment of the provisions of the Chicago Convention to which this section relates, that the benefits of those provisions apply to that country or territory, and to any other aircraft that the Minister may, by order, specify.