IN THE MATTER OF

PRE-GRANT REPRESENTATION U/S 25 (1)

The Patents Act, 1970 ("Act")

(as last amended in 2005)

&

Patent Rules, 2003 ("Rules)

(as last amended in 2024)

filed by

Dr. Kalyan C. Kankanala ..... ("Opponent")

against

Stephen L. Thaler ..... ("Applicant")

IN THE MATTER OF

Patent application bearing number **202017019068**, titled **FOOD CONTAINER AND DEVICES AND METHODS FOR ATTRACTING ENHANCED ATTENTION** ("**Impugned Application**") filed on 01/03/2012, and published on 19/03/2021, mentioning "**Device for Autonomous Bootstrapping of Unified Sentience" ("DABUS")** as the inventor. The Impugned Application is a PCT national phase entry of PCT International application bearing number PCT/IB2019/057809 filed on 17/09/2019.

TABLE OF CONTENTS

A. BACKGROUND 3

B. LEGAL PERSONHOOD IN INDIA 3

C. 'PERSON' UNDER THE PATENTS ACT 16

D. INVENTORSHIP OF DABUS UNDER THE PATENTS ACT AND RULES 22

E. PATENT SYSTEM FOR HUMAN INVENTORS 34

F. FOREIGN OFFICES AND COURTS ON DABUS INVENTORSHIP 41

G. CONCLUSION 60

H. PRAYER 61

Written Submissions of the Opponent

At the outset, the Opponent thanks the Honorable Controller for facilitating the pre-grant representation hearing on 6th November, 2024. We thank Mr. Neeraj Kumar Meena, Assistant Controller of Patents & Designs, for granting us the hearing opportunity and for the courtesies extended during the hearing. This written submission is being filed in furtherance of the hearing conducted on 6th November, 2024.

A. BACKGROUND

1. The Opponent humbly submits that the Applicant has filed the Impugned Application naming DABUS, a non-human entity (Machine / technology), as an inventor, which is the primary subject matter of this pre-grant opposition. In the examination report issued on 26/10/2021, the Honorable Controller objected to the grant of patent on two grounds relating to inventorship. Firstly, the Honorable Controller stated that DABUS, which is Artificial Intelligence, cannot be true and first inventor under Sections 2 and 6 of the Patents Act. Secondly, the Honorable Controller stated that a patent cannot be granted over the Impugned Application as a valid proof of right has not been submitted by the Applicant. On 25/07/2022, the Applicant filed a response to the examination report admitting that Sections 2 and 6 of the Patents Act refer to only natural persons, and that DABUS does not qualify as one. Though DABUS is not a natural person by virtue of it being a machine and/or artificial intelligence, the Applicant, in their response to the examination report attempted to justify the grant of a patent over the Impugned Application.

2. On 27/10/2022, the Opponent filed a pre-grant representation under section 25(1) of the Patents Act, 1970. The Applicant subsequently filed its statement and evidence in reply to the pre-grant representation on 14/03/2024. In view of the submissions by the parties, the Hon'ble controller scheduled a hearing in the matter on 6th November, 2024. This written submission is being filed in furtherance of the hearing conducted on the said date.

B. LEGAL PERSONHOOD IN INDIA

3. It is submitted that DABUS has to qualify as a legal person under the Indian law to be eligible as an inventor. The Opponent submits that legal personhood

cannot be assumed unless the legislature or a Court recognizes a person as a legal person. This recognition is generally given if a person has been attributed legal rights and duties. As it stands today, only human beings have been afforded full legal person status in India, and companies, animals, nature and deities have only been attributed legal personality to a limited extent. Among non-human persons, companies, partnerships, trusts, etc., have been given specific legal status and personality by way of statutory provisions, and so have institutions, statutory bodies and instrumentalities. However, no machine or technology, whether it may be classified as artificial intelligence or not, has been given legal personhood as of date. It is therefore submitted that DABUS, which is a machine, technology, or artificial intelligence tool, is not a person under the Indian law, and cannot be an inventor in the Impugned Application.

4. It is submitted that the Honorable Supreme Court and High Courts have over the years discussed the concept and evolution of legal personhood in different contexts, and have outlined the circumstances under which legal personality is attributed under the law on several occasions. In the case of Shriomani Gurudwara Prabandhak Committee, Amritsar vs. Som Nath Dass and Ors. (29.03.2000 - SC): [MANU/SC/0219/2000], the Honorable Supreme Court while discussing about legal personhood under the Indian law stated as follows:

> *"10. The crux of the litigation now rests on the question, whether Guru Granth Sahib is a juristic person or not. Now, we proceed to consider this issue.*
>
> *11. The very words "Juristic Person" connote recognition of an entity to be in law a person which otherwise it is not. In other words, it is not an individual natural person but an artificially created person which is to be recognised to be in law as such. When a person is ordinarily understood to be a natural person, it only means a human person. Essentially, every human person is a person. If we trace the history of a "Person" in the various countries we find surprisingly it has projected differently at different times. In some countries even human beings were not treated to be as persons in law. Under the Roman Law a "Slave" was not a person. He had no right to a family. He was treated like an animal or*

chattel. In French Colonies also, before slavery was abolished, the slaves were not treated to be legal persons. They were later given recognition as legal persons only through a statute. Similarly, in the U.S. the African-Americans had no legal rights though they were not treated as chattel.

12. In Roscoe Pound's Jurisprudence Part IV, 1959 Ed. at pages 192-193, it is stated as follows:

In civilized lands even in the modern world it has happened that all human beings were not legal persons. In Roman law down to the constitution of Antonymous Pius the slave was not a person. "He enjoyed neither rights of family nor rights of patrimony. He was a thing, and as such, like animals, could be the object of rights of property."....In the French colonies, before slavery was there abolished, slaves were "put in the class of legal persons by the statute of April 23, 1833" and obtained a "somewhat extended juridical capacity" by a statute of 1845. In the United States down to the Civil War, the free Negroes in many of the states were free human beings with no legal rights.

13. With the development of society, 'where an individual's interaction fell short, to upsurge social development, co-operation of a larger circle of individuals was necessitated. Thus, institutions like corporations and companies were created, to help the society in achieving the desired result. The very Constitution of State, municipal corporation, company etc. are all creations of the law and these "Juristic Persons" arose out of necessities in the human development. In other words, they were dressed in a cloak to be recognised in law to be a legal unit.

Corpus Juris Secundum, Vol. LXV, page 40 says:

Natural person. A natural person is a human being; a man, woman, or child, as opposed to a corporation, which has a certain personality impressed on it by law and is called an artificial person. In the C.J.S. definition 'Person' it is stated that the word "person," in its primary sense, means natural person, but that the generally accepted meaning of the word as used in law includes natural persons and artificial, conventional, or juristic persons.

Corpus Juris Secundum, Vol. VI, page 778 says:

Artificial persons. Such as are created and devised by human laws for the purposes of society and government, which are called corporations or bodies politic.

Salmond on Jurisprudence, 12th Edn., 305 says:

A legal person is any subject-matter other than a human being to which the law attributes personality. This extension, for good and sufficient reasons, of the conception of personality beyond the class of human being is one of the most noteworthy feats of the legal imagination.... Legal persons, being the arbitrary creations of the law, may be of as many kinds as the law pleases. Those which are actually recognised by our own system, however, are of comparatively few types. Corporations are undoubtedly legal persons, and the better view is that registered trade unions and friendly societies are also legal persons though not verbally regarded as corporations. ... If, however, we take account of other systems than our own, we find that the conception of legal personality is not so limited in its application, and that there are several distinct varieties, of which three may be selected for special mention...

1. The first class of legal persons consists of corporations, as already defined, namely, those which are constituted by the personification of groups or series of individuals. The individuals who thus form the corpus of the legal person are termed its members....

2. The second class is that in which the corpus, or object selected for personification, is not a group or series of persons, but an institution. The law may, if it pleases, regard a church or a hospital, or a university, or a library, as a person. That is to say, it may attribute personality, not to any group of persons connected with the institution, but to the institution itself....

3. The third kind of legal person is that in which the corpus is some fund or estate devoted to special uses - a charitable fund, for example or a trust estate...

Jurisprudence by Paton, 3rd Edn. page 349 and 350 says:

It has already been asserted that legal personality is an artificial creation of the law. Legal persons are all entities capable of being right-and-duty-bearing units - all entities recognised by the law as capable of being parties to legal relationship. Salmond said: 'So far as legal theory is concerned, a person is any being whom the law regards as capable of rights and duties...

...Legal personality may be granted to entities other than individual human beings, e.g. a group of human beings, a fund, an idol. Twenty men may form a corporation which may sue and be sued in the corporate name. An idol may be regarded as a legal persona in itself, or a particular fund may be incorporated..."

5. In the case of M. Siddiq (D) thr. L.Rs. vs. Mahant Suresh Das and Ors. (09.11.2019 - SC) : [MANU/SC/1538/2019], the Honourable Supreme Court stated with respect to juristic personality as follows:

"88. The foundational principle of a legal system is that it must recognise the subjects it seeks to govern. This is done by the law recognising distinct legal units or 'legal persons'. To be a legal person is to be recognised by the law as a subject which embodies rights, entitlements, liabilities and duties. The law may directly regulate the behaviour of legal persons and their behaviour in relation to each other. Therefore, to be a legal person is to possess certain rights and duties under the law and to be capable of engaging in legally enforceable relationships with other legal persons. Who or what is a legal person is a function of the legal system. The ability to create or recognise legal persons has always varied depending upon historic circumstances. The power of legal systems to recognise and hence also to deny legal personality has been used over history to wreak fundamental breaches of human rights. Roscoe Pound alludes to this in the following passage in "Jurisprudence":

In civilised lands even in the modern world it has happened that all human beings were not legal persons. In Roman law down to the constitution of Antonius Pius the slave was not a person. He enjoyed neither rights of family nor rights of patrimony. He was a thing, and as such like animals, could be the object of rights of property. ... In French colonies, before slavery was there abolished, slaves were put in the class of legal persons by the statute of April 23, 1833 and obtained a 'somewhat extended juridical capacity' by a statute of 1845. In the United States down to the Civil War, the free Negroes in many of the States were free human beings with no legal rights.35

...

89. Legal systems across the world evolved from periods of darkness where legal personality was denied to natural persons to the present day where in constitutional democracies almost all natural persons are also legal persons in the eyes of the law. Legal systems have also extended the concept of legal personality beyond natural persons. This has taken place through the creation of the 'artificial legal person' or 'juristic person', where an object or thing which is not a natural person is nonetheless recognised as a legal person in the law. Two examples of this paradigm are, where a collection of natural persons is collectively conferred a distinct legal personality (in the case of a cooperative society or corporation) and where legal personality is conferred on an inanimate object (in the case of a ship). The conferral of legal personality on things other than natural persons is a legal development which is so well recognised that it receives little exposition by courts today. The legal development is nonetheless well documented. Salmond in his work titled "Jurisprudence" notes:

Conversely there are, in the law, persons who are not men. A joint-stock company or a municipal corporation is a person in legal contemplation. It is true that it is only a fictitious, not a real person; but it is not a fictitious man. It is personality, not human nature, that is fictitiously attributed by the law to bodies corporate.

So far as legal theory is concerned, a person is any being whom the law regards as capable of rights and duties. Any being that is so capable is a person, whether a human being or not, and no being that is not so capable is a person, even though he be a man. Persons are the substance of which rights and duties are the attributes. It is only in this respect that persons possess juridical significance, and this is the exclusive point of view from which personality receives legal recognition.

But we may go one step further than this in the analysis. No being is capable of rights, unless also capable of interests which may be affected by the acts of others. For every right involves an underlying interest of this nature. Similarly no being is capable of duties, unless also capable of acts by which the interests of others may be affected. To attribute rights and duties, therefore, is to attribute interests and acts as their necessary bases. A person, then, may be defined for the purposes of the law, as any being to whom the law attributes a capability of interests and therefore of rights, of acts and therefore of duties.

(Emphasis supplied)

90. A legal person possesses a capability to bear interests, rights and duties. Salmond makes a crucial distinction between legal personality and the physical corpus on which legal personality is conferred:

The law, in creating persons, always does so by personifying some real thing. Such a person has to this extent a real existence, and it is his personality alone that is fictitious. There is, indeed, no theoretical necessity for this, since the law might, if it so pleased, attribute the quality of personality to a purely imaginary being, and yet attain the ends for which this fictitious extension of personality is devised. Personification, however, conduces so greatly to simplicity of thought and speech, that its aid is invariably accepted. The thing personified may be termed the corpus of the legal person so created; it is the body into which the law infuses the animus of a fictitious personality.

...

Legal persons, being the arbitrary creations of the law, may be as of as many kinds as the law pleases. Those which are actually recognised by our own system, however, all fall within a single class, namely corporations or bodies corporate. A corporation is a group or series of persons which by a legal fiction is regarded and treated as itself a person. If, however, we take account of other systems of our own, we find that the conception of legal personality is not so limited in its application...

(Emphasis supplied)

Legal personality is not human nature. Legal personality constitutes recognition by the law of an object or corpus as an embodiment of certain rights and duties. Rights and duties which are ordinarily conferred on natural persons are in select situations, conferred on inanimate objects or collectives, leading to the creation of an artificial legal person. An artificial legal person is a legal person to the extent the law recognises the rights and duties ascribed to them, whether by statute or by judicial interpretation. Salmond presciently notes that the rights and duties conferred on artificial legal persons ultimately represent the interests and benefits of natural persons. In fact, it is precisely because of the substantial benefits derived by natural persons from such objects or collectives that legislators and courts are called upon to consider conferring legal personality on such objects or collectives.

91. At a purely theoretical level, there is no restriction on what legal personality may be conferred. What is of significance is the purpose sought to be achieved by conferring legal personality. To the extent that this purpose is achieved, legal personality may even be conferred on an abstract idea. However, Salmond notes that legal personality is usually conferred on objects which are already the subject of personification or anthropomorphisms in layman's language out of "simplicity for thought and speech". The question whether legal personality is conferred on a ship, idol, or tree is a matter of what is legally expedient and the object chosen does not determine the character of the legal personality conferred. The character of the legal personality conferred is determined by the purpose sought to be achieved by conferring legal personality. There is thus a distinction between legal personality and the physical

corpus which then comes to represent the legal personality. By the act of conferring legal personality, the corpus is animated in law as embodying a distinct legal person possessing certain rights and duties.

92. By conferring legal personality, legal systems have expanded the definition of a 'legal person' beyond natural persons. Juristic persons so created do not possess human nature. But their legal personality consists of the rights and duties ascribed to them by statute or by the courts to achieve the purpose sought to be achieved by the conferral of such personality. It is important to understand the circumstances in which legal personality has been conferred and consequently the rights and duties ascribed to the inanimate objects on which this conferment takes place.

The Corporation

…

98. These observations are true even beyond the realm of admiralty law. Bryant Smith in a seminal Article titled "Legal Personality" published in 1928 in the Yale Law Journal43 states that ordinarily, the subjects of rights and duties are natural persons. However, he goes on to note that:

… for some reason or other, it becomes necessary or convenient to deal with an inanimate object such as a ship, or with a human being in a multiple capacity, as a trustee or a guardian, or with an association of human beings in a single capacity, as a partnership or a corporation. A merchant, for example, who has furnished supplies for a voyage, or a boss stevedore who has renovated the ship, cannot reach the owner of the vessel, who is outside the jurisdiction. The obvious solution is to get at the ship itself and, through it, satisfy the owner's obligations. But to devise a new system of jurisprudence for the purpose, to work out new forms and theories and processes, would too severely tax the ingenuity of the profession. The alternative is for the judges to shut their eyes to the irrelevant differences between a ship and a man and to treat the ship as if it were a man for the purpose of defending a libel.

…

It is true, of course, that the benefits and burdens of legal personality in other than human subjects, on ultimate analysis, result to human beings, which, we have no doubt, is what the writers above cited mean. But the very utility of the concept, particularly in the case of corporate personality, lies in the fact that it avoids the necessity for this ultimate analysis.

...

But, though the function of legal personality, as the quotation suggests, is to regulate behaviour, it is not alone to regulate the conduct of the subject on which it is conferred; it is to regulate also the conduct of human beings toward the subject or toward each other. It suits the purposes of society to make a ship a legal person, not because the ship's conduct will be any different, of course, but because its personality is an effective instrument to control in certain particulars the conduct of its owner or of other human beings.

(Emphasis supplied)

The above extract affirms Salmond's observations that the choice of corpus (i.e. the object) on which legal personality is conferred is not based on strict legal principle but is an outcome of historical circumstances, legal necessity and convenience. Historical circumstances require courts to adjudicate upon unique factual situations. In American admiralty law, the increase in maritime expeditions coupled with the conferral of admiralty jurisdiction on the United States Supreme Court led to an influx of cases involving maritime claims. The existing law of the day did not allow the court to effectively adjudicate upon these new claims, leading to inequitable, absurd or perverse outcomes. Hence, legal innovation was resorted to by courts. Both Lind and Smith highlighted several problems arising from the uniqueness of the ship itself - a vessel travelling across multiple jurisdictions, whose owners may reside in jurisdictions other than those where they are sought to be acted against and have little knowledge of, or control, over the operation of the ship. The conferral of legal personality on the ship did not change the behaviour of the ship. It however created a legal framework within which the interactions

between natural persons and the ship could be regulated to achieve outcomes at a societal level which are satisfactory and legally sound.

99. Both authors note that the existing personification of the ship required courts to make but a small conceptual leap of faith, which resulted in significant legal benefits for courts. This point is of greater historical than legal significance for it cannot be stated that where there is no personification of an object, a court is barred from conferring legal personality. Arguably, the independent legal personality conferred on a corporation by acts of the state involved a far greater conceptual leap. Yet it was deemed necessary and has since crystallised into a foundational principle in the law of corporations.

100. There exists another reason to confer legal personality. Objects represent certain interests and confer certain benefits. In the case of some objects, the benefits will be material. The benefit may extend beyond that which is purely material. An artificial legal person, whether a ship or a company cannot in fact enjoy these benefits. The ultimate beneficiaries of such benefits are natural persons. However, requiring a court, in every case, to make the distinction between the artificial legal person and the natural persons deriving benefit from such artificial person is inordinately taxing, particularly when coupled with the increasing use of corporations and ships. This leads us to the third rationale for conferring legal personality - convenience. The conferral of legal personality on objects has historically been a powerful tool of policy to ensure the practical adjudication of claims. By creating a legal framework, it equipped the court with the tools necessary to adjudicate upon an emerging class of disputes. It saved considerable judicial effort and time by allowing judges to obviate the distinction between artificial and natural persons where it was not relevant. The conferral of legal personality was thus a tool of legal necessity and convenience. Legal personality does not denote human nature or human attributes. Legal personality is a recognition of certain rights and duties in law. An object, even after the conferral of legal personality, cannot express any will but it represents certain interests, rights, or benefits accruing to natural persons. Courts confer legal personality to overcome shortcomings perceived in the law and to facilitate practical adjudication. By ascribing

rights and duties to artificial legal persons (imbued with a legal personality), the law tackles and fulfils both necessity and convenience. By extension, courts ascribe legal personality to effectively adjudicate upon the claims of natural persons deriving benefits from or affected by the corpus upon which legal personality is conferred. The corollary of this principle is that the rights ascribed by courts to the corpus are limited to those necessary to address the existing shortcomings in the law and efficiently adjudicate claims.

101. This principle is concisely articulated by Phillip Blumberg:

Distinguished by their particular legal rights and responsibilities, each class of legal unit is unique. They include legal subjects as disparate as individuals, maritime vessels, physical objects, partnerships, associations, special accounts, funds, economic interest groupings, and governmental agencies, as well as the corporation and the corporate group. In each case, the attribution of rights and responsibilities demarcating the perimeters of legal recognition of the unit reflects all the factors that underlie societal lawmaking: the historical development of the law, changing values and interests, socio-economic and political forces, and conceptual currents.

There are certain fundamental points. First, neither legal rights nor legal units exist "in the air". Legal rights must pertain to a legal unit that can exercise them. Further, there can be no comprehensive list of legal rights and responsibilities that automatically springs into existence upon recognition of a particular subject as a legal unit. Quite the contrary. It is the recognition of particular rights and responsibilities (principally rights) - one by one - that shapes the juridical contours of the legal unit for which they have been created.

When the law recognizes a particular right or imposes a particular responsibility on a presumptive legal unit, this constitutes recognition as a legal unit to the extent of the attribution. Other rights and responsibilities may or may not exist, depending on whether such recognition of the unit in the view of the lawmaker - whether legislator, administrator, or judge - will fulfil the underlying policies and objectives

of the law of the time in the area. Further, as society changes, the concept of legal identity and the legal consequences attributed to them inevitably change as well.

(Emphasis supplied)

All legal units are not alike. The conferral of legal personality sub-serves specific requirements that justify its recognition. The conferral of juristic personality does not automatically grant an ensemble of legal rights. The contours of juristic personality i.e. the rights and liabilities that attach upon the object conferred with juristic personality, must be determined keeping in mind the specific reasons for which such legal personality was conferred. The limits or boundaries of the rights ascribed to the new legal person must be guided by the reasons for conferring legal personality. The parameters of judicial innovation are set by the purpose for which the judge innovates. An example of this is when courts lift the veil of corporate personality where the conferral of an independent legal personality no longer serves the above goals. The application of the doctrine is defined by its ability to serve the object underlying its creation. The legal innovation will become unruly if courts were to confer legal personality on an object and subsequently enlarge the object's rights to the point where the original goal of intelligible and practical adjudication is defeated. ... "

6. It is submitted that legal personality is conferred by the law through a statute or Court decisions, and this conferral is dependent on the objective sought to be achieved. It is further submitted that attribution of legal personality is associated with legal rights, interests, duties and liabilities bestowed on the legal person. A court may bestow legal personality to achieve a certain objective, for legal expediency, or for other reasons. As it stands today, legal personality has not been conferred by any statute or a Court in India on artificial intelligence technology, machines, or tools, and therefore, DABUS is not a legal person.

7. It is further submitted that DABUS does not have any rights, interests, duties, or liabilities attributed by any law in India, and therefore DABUS does not qualify as a person under the Indian law. As DABUS is not a person, it cannot

be an inventor in the Impugned Application. Because DABUS cannot be an inventor, the Applicant cannot derive a valid right, title, or interest to file the Impugned Application from DABUS. For this reason alone, the Impugned Application may be refused by the Honorable Controller.

8. It is submitted that even companies, LLPs, and other body corporates are permitted under the Indian Patents Act to only be applicants in patent applications, and though they have legal personality, they are not permitted to be inventors, which is the exclusive domain of human beings. Today, the inventor named in the Impugned Application, DABUS, does not have any legal rights and duties, and whatever the applicant may argue, it does not even qualify as a legal person, let alone qualify as an inventor in a patent application. It is further submitted that DABUS is a non-living thing like any other thing such as a car, mobile phone, software, or a computer used by human beings, and it does not qualify as a person for purposes of patent law or any other law in force in India.

C. **'PERSON' UNDER THE Patents Act**

9. The Opponent humbly submits that the terms "Person" and "True and First Inventor" are defined as follows under the Indian Patents Act:

> *"2(1)(s) "person" includes the Government."*
>
> *"2(1)(y) "true and first inventor" does not include either the first importer of an invention into India, or a person to whom an invention is first communicated from outside India."*

10. It is submitted that the Patents Act defines the term "Person" inclusively, and the term "true and first inventor" negatively or exclusionarily. Section 2(1)(s) defines 'Person' as including the Government along with other persons recognized under the law, and Section 2(1)(y) defines 'true and first inventor' as excluding importers and persons to whom invention is communicated. Body corporates like companies, LLPs, and educational institutions along with natural persons and the Government are permitted to be applicants in patent applications and are recognized as persons for the said purpose. However, they are not recognized as persons for purposes of inventorship, which is considered to be the realm of only natural persons.

11. It is submitted that applicants and inventors are two different categories of persons under the Patents Act. While the applicant category of persons has been extended to natural persons and legally recognized non-natural persons, the inventor category of persons has been extended to only natural persons. Though the definitions of 'person' and 'true and first inventor' do not bring out the difference between applicantship and inventorship clearly, the general legal interpretation of personhood over the years brings out this differentiation.

12. It is submitted that the Black's Law Dictionary, 4th Edition, 1968 defines person as:

> *""PERSON. ...The word in its natural and usual signification includes women as well as men. Commonwealth v. Welosky, 276 Mass. 398, 177 N.E. 656. Term may include artificial beings, as corporations... Persons are the subject of rights and duties; and, as a subject of a right, the person is the object of the correla- tive duty, and conversely...*
>
> *"Persons" are of two kinds, natural and artificial. A natural person is a human being. Artificial persons include a collection or succession of natural persons forming a corporation; a collection of property to which the law attributes the capacity of having rights and duties. The latter class of artificial persons is recognized only to a limited extent in our law. Examples are the estate of a bankrupt or deceased person. Hogan v. Greenfield, 58 Wyo. 13, 122 P.2d 850, 853...*
>
> *It has been held that when the word person is used in a legislative act, natural persons will be intended unless something appear in the context to show that it applies to artificial persons, Blair v. Worley, 1 Scam., Ill., 178; Appeal of Fox, 112 Pa. 337 ; 4 A. 149 ; but as a rule corporations will be considered persons within the statutes unless the intention of the legislature is manifestly to exclude them. Stribbling v. Bank, 5 Rand., Va., 132... Persons are the subject of rights and duties; and, as a subject of a right, the person is the object of the correlative duty, and conversely... A person is such, not because he is human, but because rights and duties are ascribed to him. The person is the legal subject or substance of which the rights and duties are attributes. An individual human being*

considered as having such attributes is what lawyers call a natural person. Pollock, First Book of Jurispr. 110. Gray, Nature and Sources of Law, ch. IL"

13. In the case of *State of Assam v. State Bank of Bikaner*, [2000 SCC OnLine Gau 20], the Gauhati High Court stated as follows:

> *"6. The Dictionary meaning of 'person' as described in Black's Law Dictionary, 5th Edition reads as follows:*
>
> > *"Person.— in general usage, a human being (i.e. natural person), though by statute term may include a firm, labour organisations, partnerships, associations, corporations, legal representatives, trustees, trustees in bankruptcy, or receivers. ..."*"

"9. In the case of Bharat Petroleum Corporation Ltd. v. Union of India, AIR 1992 Punjab & Haryana 248 it was held as follows:

> *"The word 'person' having not been defined in the Act, reference can be made to the provisions of the General Clauses Act, 1897. Section 3(42) defines a person to include 'any company or association or body of individual, whether incorporated or not.'"*
>
> *"11. The definition of 'person' in the General Clauses Act is not exhaustive but is inclusive one and hence, in my opinion, the definition must be applied only where the context does not otherwise require. I would like to recapitulate the observation of the Hon'ble Calcutta High Court in a case reported in AIR 1938 Calcutta 745. It was observed:*
>
> *"In order to decide whether, in a particular instance, the word 'person' includes an artificial person or a corporation or a company, regard must be had to the setting in which the word 'person' is placed, to the circumstances in which it is used and, above all to the context in which it stands. If there is many presumption that the word 'person' includes a corporation, the presumption is no more than of a slight nature, and therefore, easily displaced. One has to consider the subject-matter of the particular enactment in which the word 'person' appears and especially the immediate context in which it is used in order to decide whether that presumption will apply or whether it will not."*

14. In the case of Ramanlal Bhailal Patel & Ors vs State Of Gujarat, 2008 (5) SCC 449, the Honourable Supreme Court while discussing the meaning of 'person' under the Gujarat Agricultural Land Ceiling Act stated as follows:

> *"15. The word 'person' is defined in the Act, but it is an inclusive definition, that is "a person includes a joint family." Where the definition is an inclusive definition, the use of the word 'includes' indicates an intention to enlarge the meaning of the word used in the Statute. Consequently, the word must be construed as comprehending not only such things which they signify according to their natural import, but also those things which the interpretation clause declares that they shall include. Thus, where a definition uses the word 'includes', as contrasted from 'means', the word defined not only bears its ordinary popular and natural meaning, but in addition also bear the extended statutory meaning (See S.K. Gupta v. K.P. Jain - AIR 1979 SC 734 following Dilworth vs. Commissioner of Stamps - 1899 AC 99 and Jobbins vs. Middlesex County Council - 1949 (1) KB 142).*
>
> *16. The ordinary, popular and natural meaning of the word 'person' is 'a specific individual human being'. But in law the word 'person' has a slightly different connotation, and refers to any entity that is recognized by law as having the rights and duties of a human being. Salmond defines 'person' as 'any being whom the law regards as capable of rights and duties' or as 'a being, whether human or not, of which rights and duties are the attributes (Jurisprudence : 12th Edition Page 299]. Thus the word 'person', in law, unless otherwise intended, refers not only to a natural person (male or female human being), but also any legal person (that is an entity that is recognized by law as having or capable of having*

rights and duties). The General Clauses Act thus defines a 'person' as including a corporation or an association of persons or a body of individuals whether incorporated or not. The said general legal definition is, however, either modified or restricted or expanded in different statutes with reference to the object of the enactment or the context in which it is used. For instance, the definition of the word 'person' in Income Tax Act, is very wide and includes an individual, a Hindu Undivided Family, a company, a firm, an association of persons or body of individuals whether incorporated or not, a local authority and every other artificial juridical person. At the other extreme is the Citizenship Act, section 2(f) of which reads thus : "Person does not include any company or association or body of individuals whether incorporated or not." Similarly, the definition under Section 2(g) of Representation of People Act 1950, is "person" does not include a body of persons.

17. Both definitions of the word 'person', in General Clauses Act and Ceiling Act, are inclusive definitions. The inclusive definition of 'person' in General Clauses Act applies to all Gujarat Act unless there is anything repugnant in the subject or the context. The inclusive definition of 'person' in section 2(21) of the Ceiling Act, does not indicate anything repugnant to the definition of 'person' in General Clauses Act, but merely adds 'joint family' to the existing definition. Therefore the definition of person in the Ceiling Act, would include the definition of person in section 3(35) of General Clauses Act. The resultant position can be stated thus : The definition of person in General Clauses Act, being an inclusive definition, would include the ordinary, popular and general meaning and those specifically included in the definition. The inclusive definition of 'person' in the Ceiling Act, in the absence of any exclusion, would have the same meaning assigned to the word in the General Clauses Act, and in addition, a 'joint family'

as defined. Thus, the word 'person' in the Ceiling Act will, unless the context otherwise requires, refer to :

(i) a natural human being,

(ii) any legal entity which is capable of possessing rights and duties, including any company or association of persons or body of individuals (whether incorporated or not); and

(iii) a Hindu Undivided Family or any other group or unit of persons, the members of which by custom or usage, are joint in estate and residence."

15. It is humbly submitted that the definition of 'person' under the Black's Law Dictionary and the General Clauses Act, and the interpretation of Courts leads one to the conclusion that when the term person is used in a statute, it would ordinarily mean a natural person unless the statute specifically includes other persons also. If the meaning of 'person' is defined inclusively as is the case under the Patents Act, its meaning would cover natural and juristic persons as defined under the General Clauses Act. Therefore, the meaning of person under the Patents Act would cover natural persons, juristic persons, and the Government for purposes of filing patent applications and owning patents.

16. It is further submitted that the meaning of who a 'person' would be in a given context is to be determined based on the context. It is humbly submitted that though the Patent Law in India has extended as a personhood of patent applicants to the government, companies, educational institutions, and other body corporates by permitting them to file patent applications, however, the same has not been extended for purposes of inventorship. As no specific statutory extension has been provided, only natural persons would qualify as inventors under the Patents Act.

17. It is submitted that the limiting of the meaning of 'inventor' to natural persons is also underscored by how 'true and first inventor' has been defined. The definition excludes importers and persons to whom invention is communicated, but does not clearly state which persons are included within its scope. Other provisions of the Patents Act also do not extend the meaning of 'true and first inventor' to persons other than natural persons.

18. Historically, the term 'true and first inventor' originated from the Statute of monopolies, 1623 in England, which prohibited monopolies, but provided an exception to patents. The specific provision reads as follows:

> *"VI Proviso for future Patents for 14 Years or less, for new Inventions.*
>
> *Provided alsoe That any Declaracion before mencioned shall not extend to any tres Patents and Graunt of Privilege for the term of fourteen yeares or under, hereafter to be made of the sole working or making of any manner of new Manufactures within this Realme, to the true and first Inventor and Inventors of such Manufactures ..."*

The phrase 'true and first inventor' used in the statute referred to only human inventors at that time, and though patent statutes underwent several changes over the years, the phrase 'true and first inventor' stayed. The Patents Act in India uses the same phrase, and in the absence of any statutory extension of its meaning to include non-natural persons or technologies, the meaning of 'true and first inventor' would mean a human being who has truly come up with an invention for the first time.

D. INVENTORSHIP OF DABUS UNDER THE PATENTS ACT AND RULES

19. The Opponent submits that DABUS does not qualify as an inventor under the Patents Act and Rules framed thereunder. The provisions of the Patents Act, 1970 as last amended in 2005 ("Patents Act") and Patent Rules, 2003 as last amended in 2024 ("Patent Rules") require an inventor to be a human being, and as DABUS is not a human being, it does not qualify as an inventor.

20. It is submitted that the Honorable Supreme Court and High Courts have consistently held that the words of a statute must be given their plain and natural meaning, and Courts must resort to only literal or textual rule of interpretation if the language is clear and unambiguous. They must not adopt purposive or contextual interpretation unless the provisions give rise to absurdity or inconvenience, and do not further the objects of the statute.

21. In Tata Consultancy Services v. State of A.P. [(2005) 1 SCC 308], the Supreme Court while discussing how statutes have to be interpreted stated as follows:

"67. …In interpreting an expression used in a legal sense, the courts are required to ascertain the precise connotation which it possesses in law.

68. It is furthermore trite that a court should not be overzealous in searching ambiguities or obscurities in words which are plain. (See IRC v. Rossminster Ltd. [(1980) 1 All ER 80] , All ER at p. 90.)

69. It is now well settled that when an expression is capable of more than one meaning, the court would attempt to resolve that ambiguity in a manner consistent with the purpose of the provisions and with regard to the consequences of the alternative constructions.

…

71. …Where on the other hand the enactment is grammatically capable of one meaning only, the opposing constructions are likely to contrast an emphasized version of the literal meaning with a strained construction. In the latter case the court will tend to prefer the literal meaning, wishing to reject the idea that there is any doubt…

…

73. A statute ordinarily must be literally construed…"

22. In Bayer Corporation v. Union of India [2017 SCC OnLine Del 7378], the Delhi High Court stated as follows:

"19. A statute, like the Patents Act is, being an edict of the Legislature, the best medium for interpretation thereof is the words of a statute. Supreme Court in Guru Jambheshwar University v. Dharam Pal (2007) 2 SCC 265 has reiterated that the words of a statute are first understood in their natural, ordinary or popular sense and phrases and sentences are construed according to their grammatical meaning, unless that leads to some absurdity or there is something in the context or in the object of the statute to suggest to the contrary. The true way is to take the words as the Legislature has given them and to take the meaning which the words naturally imply, unless where construction of those words is, either by the preamble or by the context of the words in question, controlled or altered. The golden rule is that the words of a statute must

prima facie be given their ordinary meaning and natural and ordinary meaning of the words should not be departed from, unless it can be shown that the legal context in which the words are used requires a different meaning."

21. In Hiralal Ratanlal v. STO (1974. 3) 1 SCC 216 reiterated in Raghunath Rai Bareja v. Punjab National Bank (2007) 2 SCC 230 it has been held that the first and the foremost principle of interpretation of a statute in every system of interpretation is the literal rule of interpretation and the other rules of interpretation i.e. the mischief rule, purposive interpretation etc. can only be resorted to when the plain words of a statute are ambiguous or lead to no intelligible results or if read literally would nullify the very object of the statute. Where the words of a statute are absolutely clear and unambiguous, recourse cannot be had to the principles of interpretation other than the literal rule. The language employed in a statute is the determinative factor of the legislative intent. The Legislature is presumed to have made no mistake. The presumption is that it intended to say what it has said."

23. In A.Ram Mohan vs State [CRL.R.C.No.265 of 2015], the Madras High Court while dealing with how a statute must be interpreted stated as follows:

"18. ...One of the well recognised canons of construction is that the legislature speaks its mind by use of correct expression and unless there is any ambiguity in the language of the provision the Court should adopt literal construction if it does not lead to an absurdity...If the literal construction leads to an absurdity, external aids to construction can be resorted to. To ascertain the literal meaning it is equally necessary first to ascertain the juxtaposition in which the rule is placed, the purpose for which it is enacted and the object which it is required to subserve and the authority by which the rule is framed. This necessitates examination of the broad features of the Act...

19. ...the proper course in interpreting a statute in the first instance is to examine its language and then ask what is the natural meaning

uninfluenced by the considerations derived from previous state of law and then assume that it was property intended to leave unaltered...

20. ...The interpretation function of the Court is to discover the true legislative intent, it is trite that in interpreting a statute the Court must, if the words are clear, plain, unambiguous and reasonably susceptible to only one meaning, give to the words that meaning, irrespective of the consequences. Those words must be expounded in their natural and ordinary sense. When a language is plain and unambiguous and admits of only one meaning no question of construction of statute arises, for the Act speaks for itself...In considering whether there is ambiguity, the Court must look at the statute as a whole and consider the appropriateness of the meaning in a particular context avoiding absurdity and inconsistencies or unreasonableness which may render the statute unconstitutional.

...

22. ...The cardinal rule of construction of statutes is to read the statutes literally, that is, by giving to the words their ordinary, natural and grammatical meaning...It is a well settled law of interpretation that when the words of the statute are clear, plain or unambiguous, ie., they are reasonably susceptible to only one meaning, the Courts are bound to give effect to that meaning irrespective of consequences...

...

37. ...It is well known that in a given case the court can iron out the fabric but it cannot change the texture of the fabric. It cannot enlarge the scope of legislation or intention when the language of the provision is plain and unambiguous. It cannot add or subtract words to a statute or read something into it which is not there. It cannot rewrite or recast legislation...Where the language is plain and admits of but one meaning, the task of interpretation can hardly be said to arise...It is a corollary to the general rule of literal construction that nothing is to be added to or taken from a statute unless there are adequate grounds to justify the inference that the Legislature intended something which it omitted to express...The onus of showing that the words do not mean what they

say lies heavily on the party who alleges it must advance something which clearly shows that the grammatical construction would be repugnant to the intention of the Act or lead to some manifest absurdity."

24. In Mohan Kumar Singhania and Ors. vs Union of India and Ors. [1991 SCALE (2) 565], the Supreme Court stated as follows:

"53. ...It is a rule now firmly established that the intention of the legislature must be found by reading the statute as a whole.

...

67. ...that when the language is clear/and explicit and the words used are plain and unambiguous, we are bound to construe them in their ordinary sense with reference to other clauses of the Act or Rules as the case may be, so far as possible, to make a consistent enactment of the whole statute or series of statutes/Rules/Regulations relating to the subject-matter..."

25. It is submitted that the cases clearly indicate that provisions of the statute must be interpreted literally unless there is ambiguity in the words used. If the plain meaning of the provisions is in line with the statute as a whole and its objects, no other meaning can be attributed to it. It is submitted that a plain reading of different provisions of the Patents Act would lead to the inevitable conclusion that only human beings can be inventors under the Patents Act and Rules, and that DABUS cannot be an inventor.

26. Relevant provisions of the Patents Act read as follows:

"2. DEFINITIONS AND INTERPRETATION.

(1) In this Act, unless the context otherwise requires -

...

(ab) "assignee" includes an assignee of the assignee and the legal representative of a deceased assignee and references to the assignee of

any person include references to the assignee of the legal representative or assignee of that person;

...

(j) "invention" means a new product or process involving an inventive step and capable of industrial application;

(ja) "inventive step" means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art;

(k) "legal representative" means a person who in law represents the estate of a deceased person;

…

(m) "patent" means a patent for any invention granted under this Act;

(n) "patent agent" means a person for the time being registered under this Act as a patent agent;

...

" (p) "patentee" means the person for the time being entered on the register as the grantee or proprietor of the patent."

...

(s) "person" includes the Government;

(t) "person interested" includes a person engaged in, or in promoting, research in the same field as that to which the invention relates;

...

(y) "true and first inventor" does not include either the first importer of an invention into India, or a person to whom an invention is first communicated from outside India."

"6. PERSONS ENTITLED TO APPLY FOR PATENTS.

(1) Subject to the provisions contained in section 134, an application for a patent for an invention may be made by any of the following persons, that is to say,

(a) by any person claiming to be the true and first inventor of the invention;

(b) by any person being the assignee of the person claiming to be the true and first inventor in respect of the right to make such an application;

(c) by the legal representative of any deceased person who immediately before his death was entitled to make such an application.

(2) An application under sub-section (1) may be made by any of the persons referred to therein either alone or jointly with any other person."

"7. FORM OF APPLICATION.

...

(2) Where the application is made by virtue of an assignment of the right to apply for a patent for the invention, there shall be furnished with the application, or within such period as may be prescribed after the filing of the application, proof of the right to make the application.

(3) Every application under this section shall state that the applicant is in possession of the invention and shall name the person claiming to be the true and first inventor; and where the person so claiming is not the applicant or one of the applicants, the application shall contain a declaration that the applicant believes the person so named to be the true and first inventor."

"10. CONTENTS OF SPECIFICATIONS.

...

(6) A declaration as to the inventor ship of the invention shall, in such cases as may be prescribed, be furnished in the prescribed form with the

complete specification or within such period as may be prescribed after the filing of that specification."

"83. GENERAL PRINCIPLES APPLICABLE TO WORKING OF PATENTED INVENTIONS.

Without prejudice to the other provisions contained in this Act, in exercising the powers conferred by this Chapter, regard shall be had to the following general considerations, namely;—

(a) that patents are granted to encourage inventions and to secure that the inventions are worked in India on a commercial scale and to the fullest extent that is reasonably practicable without undue delay;

(b) that they are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article;

(c) that the protection and enforcement of patent rights contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations;

(d) that patents granted do not impede protection of public health and nutrition and should act as instrument to promote public interest specially in sectors of vital importance for socio-economic and technological development of India;

(e) that patents granted do not in any way prohibit Central Government in taking measures to protect public health;

(f) that the patent right is not abused by the patentee or person deriving title or interest on patent from the patentee, and the patentee or a person deriving title or interest on patent from the patentee does not resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology; and

(g) that patents are granted to make the benefit of the patented invention available at reasonably affordable prices to the public."

"25. OPPOSITION TO THE PATENT.

(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;

...

(h) that the applicant has failed to disclose to the Controller the information required by section 8 or has furnished the information which in any material particular was false to his knowledge;

***i)** that in the case of a patent granted on a convention application, the application for patent was not made within twelve months from the date of the first application for protection for the invention made in a convention country or in India by the patentee or a person from whom he derives title;"*

27. It is submitted that the Patents Act makes clear demarcations between what is an "Invention", Who is a "Patentee", and who is an "Inventor". Each of these have been independently defined and addressed under the Indian Patents Act. Section 2(1)(j) defines "Invention", Section 2(1)(p) defines "Patentee", and Section 2(1)(y) defines "True and First Inventor". These definitions are independent of each other and have to be cumulatively satisfied to merit a patent grant. Satisfying one or two of them is not sufficient, and all requirements under the Patents Act with respect to the aforementioned have to be independently met. It is further submitted that one requirement under the patent law cannot be substituted for another. It is therefore submitted that the Applicant's argument of inventorship based on existence of an invention or its filing by a person is not valid. It is submitted that though the Applicant may qualify as a Patentee independently, and the invention in question may satisfy Section 2(1)(j), the Invention claimed in the Impugned Application would still not be patentable because it was not created by a

human inventor, which is required to satisfy the requirement of true and first inventorship.

28. It is submitted that Section 6 of the Patents Act specifically requires a patent applicant to be a "true and first inventor" or the "assignee" or "legal representative" of a true and first inventor. In particular, the Section in relevant part relating to who may file a patent reads as follows:

> *"(a) by any person claiming to be the true and first inventor of the invention;*
>
> *(b) by any person being the assignee of the person claiming to be the true and first inventor in respect of the right to make such an application;*
>
> *(c) by the legal representative of any deceased person who immediately before his death was entitled to make such an application."*

29. By its very language, Section 6 does not permit any application that does not originate from an invention created by a true and first inventor. In the present case, the Applicant will be able to file a patent application only if the true and first inventor assigns the invention to him. This assignment or transfer requires documented and signed/executed transfer of rights, which is clearly provided in Section 7 of the Patents Act. Section 7 clauses (3) and (4) and Section 10 clause (6) require proof of right to file a patent application, and a declaration from the inventor. Such proof of right and declaration require details such as nationality, address, and signatures of the inventor, which cannot be provided by a technology, machine or artificial intelligence such as DABUS. Though the Applicant has mentioned DABUS in both Form 1 relating to proof of right and Form 5 relating to inventorship declaration, the signatures of DABUS are missing in the documents. Additionally, the Applicant has mentioned the nationality of DABUS as United States though the country does not recognize machines or technologies as nationals or inventors, and by doing so, has given false information and misled the patent office. Furthermore, it is submitted that the Applicant also cannot self-authorize himself to legally represent DABUS without a valid assignment proving transfer of rights, which DABUS cannot do.

30. As DABUS is admittedly a technology, machine, or AI tool, it does not hold any legal rights that can be transferred to Mr. Thaler. It is therefore submitted that the Applicant, Mr. Stephen Thaler, does not have a valid right to file a patent application as the invention was generated by a non-human thing, DABUS, which does not have the legal capacity to provide him the right to file or give a declaration with details relating to its address and nationality, and by affixing legally valid signatures.

31. In his article on AI inventorship in India based on the decision of the UK Supreme Court relating to the patent applications filed by Mr. Stephen Thaller, Professor Arul George Scaria, a well-known IP scholar from National Law School of India University, stated as follows:

> *"If one examines the wordings and structure of the Patents Act 1970, particularly Sec. 2 and Sec. 6, it would immediately become apparent that there are similarities with the approach of the UK patent law. Sec. 2 of the Act provides the definitions for some of the keywords used in the statute. Sec. 6 of the Patents Act 1970 talks about "Persons entitled to apply for patents". If one compares this provision with Sec. 7 of the UK Patents Act, it would become immediately apparent that the structure is very similar to the structure followed in Sec. 7 of the UK Patents Act. A careful reading of the three scenarios covered in Sec. 6 confirms that 'the true and first inventor' conceptualised under the Patents Act 1970 is also limited to 'natural persons'. In other words, unless the true and the first inventor is a natural person, no application can arise under Sec. 6 of Patents Act 1970."*
>
> *[Arul George Scaria, Learning from Thaler v. Comptroller-General of Patents, Designs and Trade Marks: Short-Term and Long-Term Implications for India's Patent Regime, 5 Bennett J. Legal Stud. 103, 110 (2024).]*
>
> *As opined by Professor Scaria, the Indian Patents Act permits only natural persons to be named as inventors in patent applications, and the UK Supreme Court's decision based on similar statutory provisions under the UK patent law confirms this interpretation.*

32. It is further submitted that the phrase "true and first inventor" used in Section 7 relates to a human inventor and not to a machine or non-human form. The definition of "True and First Inventor" in Section 2(1)(y) uses the words 'importer' and 'person to whom invention is communicated'. These words on their face do not give clarity about human inventorship, but when this definition is viewed in the context of other provisions, clarity about requirement of human inventorship emerges. For example, Section 6 while referring to legal representative states that this person is the representative of a deceased true and first inventor or deceased assignee of the true and first inventor. As machines do not die and only humans qualify as deceased persons, it may be concluded that "True and First Inventor" in the Patents Act only includes human inventors and not technologies, machines or AI forms. It is further submitted that several provisions include the phrase "deceased person", which fortifies this submission. For example, Section 2(1) ab) and (k), and Section 6 specifically refer to deceased persons, and only humans qualify as such.

33. It is submitted that the Black's Law Dictionary, 4th Edition, 1968 defines inventor as:

> *"INVENTOR. One who finds out or contrives some new thing; one who devises some new art, manu- facture, mechanical appliance, or process; one who invents a patentable contrivance. Sparkman v. Higgins, 22 Fed.Cas. 879; Henderson v. Tomp- kins, C.C.Mass., 60 F. 764."*

34. It is submitted that the term 'one' used to define an 'inventor' has been used as a pronoun, which is generally used to refer to people. It is therefore submitted that the definition of inventor under the Black's Law Dictionary refers to people, who are human beings and natural persons.

35. It is further submitted that important provisions of the Patents Act refer to persons in different contexts, and all those definitions refer to natural persons. Under circumstances where non-natural persons are covered, the Patents Act specifically mentions the same as an exception. Section 2(1)(s) specifically provides that the meaning of "Person" includes the Government, and the said provision does not expressly cover technologies, machines, artificial intelligence, or other non-human forms. It is therefore submitted that without

explicit recognition of technologies, machines or artificial intelligence as an inventor or person, DABUS, is not recognized as a person under the Patents Act, and personhood or inventorship cannot be extended to it.

36. The Opponent further submits that terms such as "inventive step" refer specifically to individuals, who are human beings. The definition of 'Inventive Step' includes reference to a person having ordinary skill in the art, and Courts have consistently held that such a person is a person with common general knowledge, has certain qualifications based on the invention, and has experience related to the field of the invention. As these attributes are possible only in human beings, the reference is unambiguously to a human being, and inventive step of an invention created by another human inventor is assessed through the eyes of a skilled human person. This makes it amply clear that what the patent law in India seeks to protect are inventions made by human beings assessed by the standards of other human beings. In the present case, it is submitted that DABUS is not a human being, and any invention generated by it would not be protectable.

E. PATENT SYSTEM FOR HUMAN INVENTORS

37. The Opponent humbly submits that one of the primary objectives of the patent system in India is to promote the progress of science and technology for the benefit of the public. It does this by incentivizing and encouraging human invention, creativity and ingenuity by granting exclusive rights over inventions for a limited period of time. Several Court Judgments and provisions of the Patents Act reflect this objective, and indicate that the patent system's objective is to promote human inventive activity.

38. In the case of Biswanath Prasad Radhey Shyam vs Hindustan Metal Industries [MANU/SC/0255/1978], the Honorable Supreme Court while speaking about the objective of the patent law in India, and requirements for patentability, stated as follows:

> *"17. The object of Patent Law is to encourage scientific research, new technology and industrial progress. Grant of exclusive privilege to own, use or sell the method or the product patented for a limited period, stimulates new inventions of commercial utility. The price of the grant of the monopoly is the disclosure of the invention at the Patent Office, which*

after the expiry of the fixed period of the monopoly, passes into the public domain.

18. The fundamental principle of Patent Law is that a patent is granted only for an invention which must be new and useful. That is to say, it must have novelty and utility. It is essential for the validity of a patent that it must be the inventor's own discovery as opposed to mere verification of what was, already known before the date of the patent."

"24. "A patentable invention, therefore, must involve something which is outside the probable capacity of a craftsman-which is expressed by saying it must have 'subject matter' or involve an 'inventive step'..."

39. As stated in the case, it is submitted that the objective of patent law is to promote scientific research, new technology, and industrial progress for the good of the public constituted by human beings and an invention will be patentable only if it is the inventor's own creation and is beyond the capacity of an ordinary craftsman. This decision of the Honorable Supreme Court was based on the 1911 Patents Act, and at that time artificial intelligence did not exist. The words inventor and craftsman used by the Court referred to human beings forming part of the general public, and a human inventor was given the reward of a patent if what he had invented was beyond the capacity of an ordinary craftsman, another human being. This did not change under the 1970 Patents Act, which also uses the phrase 'true and first inventor' to refer to human inventors, and compares their inventive activity with the work of other humans having ordinary skill in the art.

40. In the case of Novartis Ag vs Union Of India & Ors,AIR [MANU/SC/0281/2013], the Supreme Court while speaking about the evolution of the patent law in India stated as follows:

"37. Observing that industrial countries and under-developed countries had different demands and requirements, Justice Ayyangar pointed out that the same patent law would operate differently in two countries at two different levels of technological and economic development, and hence the need to regulate the patent law in accordance with the need of the country. Commenting upon the Patents and Designs Act, 1911, (even after its post-Independence amendments) Justice Ayyangar said:

It is further obvious however that the system would not yield the same results when applied to under-developed countries. I entirely agree with the views of the Patents Enquiry Committee that "the Indian Patent system has failed in its main purpose, namely, to stimulate invention among Indians and to encourage the development and exploitation of new inventions for industrial purposes in the country so as to secure the benefits thereof to the largest section of the public. (Interim Report, p. 165).

38. Justice Ayyangar observed that the provisions of the Patent law have to be designed, with special reference to the economic conditions of the country, the state of its scientific and technological advancement, its future needs and other relevant factors, and so as to minimize, if not to eliminate, the abuses to which a system of patent monopoly is capable of being put. Bearing in view the matters set above, he recommended retaining the patent system, but with a number of improvements."

"43. Justice Ayyangar submitted a comprehensive Report on Patent Law Revision in September 1959 and the new law of patent, namely, the Patents Act, 1970, came to be enacted mainly based on the recommendations of the report, and came into force on April 20, 1972, replacing the Patents and Designs Act, 1911."

41. It is submitted that the Patents Act, 1911 was replaced with the 1970 Patents Act because the 1911 Act failed to stimulate invention among Indians for the benefit of the largest section of the public. Justice Ayyangar uses the phrase 'stimulate invention among Indians' referring to the fact that the objective of the patent system in India is to incentivize Indians, who are human beings to create inventions. As the erstwhile Act failed to incentivize Indian inventors, a new and improved Act was brought into place. It is clear from Justice Ayyangar's report cited by the Supreme Court that the 1911 and 1970 Patents Acts considered only human inventors, and established a system to protect human generated inventions by testing them against the work of other human beings.

42. It is further submitted that various patentability provisions in the patents act and their interpretation reflect the fact that the patent law in India was primarily created to promote human ingenuity. The Courts while interpreting Sections 3(c) and 3(j) have not only emphasized the requirement of an invention to have human intervention to qualify for patentability but have also looked at the extent of human intervention required for meeting the patentability criteria.

43. In the case of Immunas Pharma vs. Assistant Controller of Patents and Designs , [MANU/TN/1456/2024], the Madras High Court while discussing the meaning and scope of Section 3(c) stated as follows:

> *"17. Reverting to Indian law, as noticed earlier, Section 3(c) uses the expression "occurring in nature" to qualify "discovery of a non-living substance." While it could be argued that this qualifier is only intended to underscore that the exclusion would not apply to a non-living substance that is man-made, in my view, said explanation does not withstand close scrutiny because such non-living substance, if man-made and novel, would not be discovered; it would be created or invented. If man-made but not novel, it would be produced and not discovered. It would also not surmount the Section 2(1)(j) hurdle and the Section 3(c) exclusion is clearly not intended for such non-living substances. What is the sequitur of the use of the expression "occurring in nature": would a synthetic version of a substance that rarely occurs in nature but is required to be produced in large quantities for the treatment of serious illnesses qualify for or be excluded from patent protection? Should a patent applicant establish that such non-living substance never occurs in nature? The text of clause (c) of Section 3 contains guidance.*
>
> *18.The statutory prescription is "discovery of any ... non-living substance occurring in nature". Both the use of the noun "discovery"- which implies finding something which already exists and not producing, engineering or making something - and the use of the present continuous form "occurring in nature" indicate that the exclusion will only apply to the process of finding a hitherto undiscovered non-living substance by identifying and isolating it from nature. While reaching this conclusion, I take on board the presumption in statutory construction that redundancy*

should not be imputed to Parliament, and that the expression "occurring in nature" should not be robbed off all meaning and purpose. Ultimately, it should not be lost sight of that Section 3(c) is confined to patent exclusions or ineligibility and passing through such filter does not guarantee the grant of patent."

44. In the case of Health Protection Agency vs The Controller General of Patents and Designs and Ors . [MANU/IC/0041/2020], the IPAB stated as follows:

"10. The Respondent No. 2 has alleged that the "biological process indicator" defined in Claims 1-10 on file is not patentable under sections 3(c) of the act, which excludes from patentability "the discovery of any living thing or non-living substance occurring in nature", as the claimed subject matter is " a natural substance (for discovery of any new use)". This objection is totally unfounded and appears very unscientific.

- *The biological process indicator is a product" comprises a thermostable kinase immobilished directly onto or inside a solid support selected from a plastic, ceramic, or metallic surface, or an indicator strip, a dip-stick, or a bead, which are not "living things or non-living things occurring in nature". Plastics, ceramics, indicator strips, dip-sticks, and bead are non-naturally occurring substance requiring human intervention for their manufacture.*

- *In nature, thermostable kinases are found within cells, and are not immobilised directly onto or inside any solid support. Human intervention is required in order to immobilise the kinase directly onto or inside the recited solid supports via non-specific adsorption or chemical cross-linking.*

- *Also, the kinase is pretreated to make it thermostable to withstand high temperature environment.*

- *Evidently, the claimed biological process indicator does not occur in nature; but is an artificially manufactured product requiring substantial human intervention.*

- *The claimed biological process indicator is not a mere discovery. As stated in Lane-Fox v. The Knightsbridge Electric Lighting Co.*

Ltd., [(1892)]9 RPC 413 at 416] "An invention is not the same thing as a discovery. When Volta discovered the effect of an electric current from the battery on a frog's leg he made a great discovery, but no patenable invention. "Also, in Reynolds v. Herbert Smith & Co. Ltd. [(1903)20 RPC 123 AT 123] buckley, J. stated "invention also adds to human knowledge, but not merely by disclosing something. Invention necessarily involves also the suggestion of an act to be done, and it must be an act which results in a new product, or a new result, or a new process, or a new combination for producting an old product or an old result". Clearly, the claimed subject matter is not a discovery, rather, it involves various technical steps to be performed in order to prepare the new product with new results.

"12. Therefore, the presently claimed biological process indicator is a non-naturally occurring product, which is not found in nature and requires human intervention for its preparation. The exclusion set out in Section 3(c) of the Act does not apply to the subject-matter of Claims 1-10."

45. In the case of The University of British Columbia vs . Controller of Patents [MANU/IC/0110/2020], the IPAB stated as follows:

"6. …6.2.2 The monoclonal antibodies claimed in the present application are not substances occurring in nature but are very much products of human ingenuity.

…

6.2.5 The monoclonal antibodies claimed are produced by hybridoma technology which utilizes a man-made cell comprising a fusion of spleen cells with myeloma cells, that is, a hybridoma cell - See Page 107 of the Appeal. Hybridomas do not occur in nature. Accordingly, monoclonal antibodies produced by hybridomas cannot be substances occurring in nature."

"9. We are of the opinion that for the reasons as explained by the appellant a "non-human" monocolonal antibody, do not attract the provisions of section 3(c) of the Patent Act, 1970."

46. In the case of Nuziveedu Seeds Ltd. and Ors. vs. Monsanto Technology LLC and Ors [MANU/DE/1388/2018], the Delhi High Court while dealing with Section 3(j) stated as follows:

"93. From the varied judicial interpretation of what constitutes an "essentially biological process", the primary criteria that emerge for qualifying as an essentially biological process and thereby, to be excluded from patentability, are as follows:

- *The process for the production of the plants/variety should based on the sexual crossing of whole genomes.*

- *Further, in the subsequent selection of the plants/variety, the degree of human intervention (even when it is of a technical nature) should be enabling and in the nature of assistance to the performance of the process steps. Merely because a step of human technical intervention exists does not rule out the disqualification as an "essentially biological process", such intervention needs to amount to a significant alteration/introduction in the genetic composition."*

47. It is humbly submitted that these cases dealing with provisions of Section 3 that relate to non-patentable inventions clearly indicate that it is only inventions made by human beings that are patentable, and if there is no human intervention, an invention would not be patentable however inventive it might be. Intervention or ingenuity of machines and/or technologies like DABUS would not satisfy these requirements, and if a human who reviews the results of the output or results produced by DABUS files for a patent, the act of human being would be considered as a discovery, and will be hit by the exclusion under Section 3(c) of the Patents Act. It is therefore humbly submitted that the invention that forms part of the Impugned Application is not patentable because DABUS cannot be an inventor, and because identification of the results produced by DABUS would amount to mere discovery by the Applicant.

F. FOREIGN OFFICES AND COURTS ON DABUS INVENTORSHIP

48. It is humbly submitted that the Applicant has filed patent applications for the same/substantially the same invention in various jurisdictions around the world. The current status of these applications is provided in the table below.

Table – Status of foreign patent applications naming DABUS as inventor

SL no.	Country	Application No.	Filing date	Status as on 23.09.2024
1.	PCT	PCT/IB2019/057809	17.09.2019	National phase completed
2.	AU	2019363177	17.09.2019	Refused by IPO on 09.02.2021
3.	BR	112021008931-4	17.09.2019	Refused by IPO on 19.09.2023
4.	CA	3137161	Under review by Patent Appeal board	
5.	CH	00408/21	20.04.2021	Awaiting examination (No inventor named)
6.	CN	2019800061580	17.09.2019	NO RESULTS
7.	DE	102019128120.2	17.10.2019	Refused by IPO on 25.03.2020
8.	DE	102019129136.4	29.10.2019	Refused by IPO on 28.11.2023
9.	DE	112019005218.0	NO RESULTS	NO RESULTS
10.	EP	18275163.6	17.10.2018	Refused by IPO on 22.07.2022

11.	EP	18275174.3	07.11.2018	Refused by IPO on 04.08.2022 based on Refusal by EP Board of Appeals
12.	EP	21216024.6	17.10.2018	Under examination
13.	GB	1816909.4	17.10.2018	Refused by IPO on 23.02.2023
14.	GB	1818161.0	07.11.2018	Refused by IPO on 13.02.2020
15.	GB	2105428.0	17.09.2019	Refused by IPO on 24.05.2022
16.	GB	2206827.4	16.04.2021	Pending
17.	IL	268605	08.08.2019	Refused by IPO on 19.03.2023
18.	IL	289693	09.01.2022	Under Examination
19.	IL	268604	08.08.2019	Refused by IPO 19.03.2023
20.	JP	110001519	17.09.2019	NO RESULTS
21.	KR	10-2020-7007394	12.03.2020	Refused on 28.09.2022
22.	NZ	776029	12.05.2021	Under examination
23.	SA	521422019	12.05.2021	Refused on 14.01.2024
24.	SG	11202254184A	29.11.2022	Abandoned on 22.09.2023
25.	SG	10202301386Q	17.05.2023	Abandoned on 07.12.2023
26.	TW	108137438	17.10.2019	Refused
27.	TW	108140133	05.11.2019	Refused
28.	US	16/524,532	29.07.2019	Refused
29.	US	16/524,350	29.07.2019	Refused
30.	ZA	2021/03242	13.05.2021	Granted

49. It is humbly submitted that the Applicant has filed patent applications for the same/substantially the same invention in at least Eighteen (18) countries including Australia, Brazil, Canada, China, Europe, Germany, India, Israel, Japan, New Zealand, Saudi Arabia, Singapore, South Africa, South Korea, Switzerland, Taiwan, United Kingdom and USA.

50. It is submitted that the Patent offices of Australia, Brazil, Germany, Europe, Israel, South Korea, Saudi Arabia, Singapore, Taiwan, United Kingdom and USA have rejected / refused the applications including divisional applications, if any, filed for the invention titled FOOD CONTAINER AND DEVICES AND METHODS FOR ATTRACTING ENHANCED ATTENTION in the name of Stephen L. Thaler and mentioning "Device for Autonomous Bootstrapping of Unified Sentience" ("DABUS") as the inventor.

51. It is submitted that the Australian Patent office while rejecting the Applicant's invention stated as follows:

> *"17. Section 15 is the most important provision to consider:*
>
> *(1) Subject to this Act, a patent for an invention may only be granted to a person who:*
>
> *(a) is the inventor; or*
>
> *(b) would, on grant of a patent for the invention, be entitled to have the patent assigned to the person; or*
>
> *(c) derives title to the invention from the inventor or a person mentioned in paragraph (b); or*
>
> *(d) is the legal representative of a deceased person mentioned in paragraph (a), (b) or (c).*
>
> *(2) A patent may be granted to a person whether or not he or she is an Australian citizen*
>
> *…*

34. Section 15(1) is inconsistent with an artificial intelligence machine being treated as an inventor, since it is not possible to identify a person who can be granted a patent. Consequently the present application does not comply with regulation 3.2C. This deficiency has not been corrected and is not capable of being corrected. It follows that the application lapses pursuant to regulation 3.2C(5).”

52. The Brazilian Patent office while rejecting the Applicant’s application in Brazil held as follows:

“In light of the above, the Attorney General's Office, in strict judgment of legality, ruled that it was impossible to indicate or name artificial intelligence as an inventor in a patent application filed in Brazil, considering the provisions of article 6 of Law No. 9,279/96, the Paris Convention (CUP) and the TRIPS Agreement. In view of the above and considering the determination of the Specialized Federal Attorney General's Office of the INPI, we acknowledge the appeal, denying it on its merits, with the proposal to maintain the appealed decision.” (Machine Translated)

53. The European Patent Office refused the Applicant’s application bearing number 18275163.6 on July 5, 2022 based on the decision of the Board of Appeal. The Board of Appeal in its ruling held as follows:

4.2 Legal framework

The application has been rejected because the inventor's designation did not comply with Article 81, first and second sentence, and Rule 19 EPC. However, further provisions are relevant for the assessment of the appeal as well as for the reasoning of the decision under review. These are discussed below.

4.2.1 Article 81 EPC

According to Article 81 EPC "[t]he European patent application shall designate the inventor" (first sentence); where the applicant is not the inventor or is not the sole inventor "[t]he designation shall contain a statement indicating the origin of the right to the European patent" (second sentence). This obligation for the applicant is complementary to

the right of the inventor, set out in Article 62 EPC, to be mentioned as such before the EPO.

To implement these provisions, Rule 20 EPC provides that "[t]he designated inventor shall be mentioned in the published patent application and the European patent specification, unless the inventor informs the European Patent Office in writing that he has waived his right to be mentioned". Under Rule 21 EPC, "[a]n incorrect designation of an inventor shall be rectified upon request and only with the consent of the wrongly designated person". Where such a request is filed by a third party, the consent of the applicant or the proprietor of the patent is required. Provisions to the same effect were already included in the implementing regulations to the EPC 1973.

It follows from the wording of Article 81 and the aforementioned secondary legislation that the designation of the inventor is a mandatory requirement of the application. However, the inventor is not mentioned in the publication if they ask not to be. The statement on the origin of the right to the invention is in turn an integral part of the designation of inventor, but only where applicant and inventor are not the same person.

Article 81, second sentence, EPC does not require a generic explanation as to why an applicant, who is not the inventor, is entitled to file a European patent application. The provision is more specific: it refers to the "origin of the right to the European patent". In this way, by its very wording, Article 81 EPC establishes a link to Article 60 EPC, where the right to a European patent is mentioned and provided for.

4.2.2 Article 60 (1) EPC

Under Article 60(1), first sentence, EPC, "[t]he right to a European patent shall belong to the inventor or his successor in title". According to Article 60(1), second sentence, EPC, "[i]f the inventor is an employee, the right shall be determined in accordance with the law of the State in which the employee is mainly employed". Default rules are provided in Article 60(1), third sentence, EPC, for the case where this State cannot be determined.

Article 60(1) EPC is a stand-alone substantive provision of the EPC and fulfils three functions.

Firstly, it creates the right to the European patent; secondly, it vests this right in the inventor; finally, it provides for the separate transferability of the right even before a European application is filed.

Article 60(1) EPC envisages two ways to acquire the right to a European patent: the first is to develop the invention ("inventor"), and the second is to derive the right from the inventor after an invention has been made ("successor in title").

Both the concepts of inventor and successor in title are notions of the EPC; they must be interpreted uniformly and autonomously. While the concept of inventor does not require any support from domestic legislation, the concept of successor in title implies an interaction with national law. Indeed, the EPC has not established a comprehensive, self-sufficient legal order and private law. This does not mean that Article 60(1) EPC constitutes a pure reference to national legislation devoid of any content. "Successor in title" has an ordinary meaning under Article 31(1) of the Vienna Convention on the Law of Treaties (1969) ("VCLT"): it refers to a situation where a pre-existing right goes from one subject (the legal predecessor; see also Article 55(1)(a) EPC) into the sphere of another (the legal successor, Article 60(1) EPC). National law governs the question of whether the transfer is valid or has occurred by operation of a contract, inheritance or other rules of law. Since the EPC is silent on the matter with the exception of employment relationships, a national court seized with the issue will identify the applicable rules according to their domestic conflict of laws-provisions (van Empel, The Granting of European Patents, Leiden 1975, 81; Ubertazzi, Profili soggettivi del brevetto, Milano 1985, 281; Cronauer,

Das Recht auf das Europaische Patent, 1988, Koln et al, 105) .

However, when national courts decide on entitlement under the Protocol on Jurisdiction and the Recognition of Decisions in respect of the Right to the Grant of a European Patent, they must apply Article 60(1) EPC and not the provisions governing entitlement to national patents. Therefore,

even if, e.g., UK or Australian law provided for other forms of acquiring originally or deriving the right to the patent (such as possession) and these forms went beyond the scope of Article 60(1) EPC, as suggested by the appellant, these rules would apply to domestic applications, but not to European patents, the right to which is attributed to the subjects listed in Article 60(1) EPC and no one else.

In view of the normative link between Article 60(1) and Article 81 EPC, not just any declaration, irrespective of its content, can be considered to comply with the EPC. It must be one which identifies the origin of the right in a manner consistent with Article 60(1) EPC. This is the case where the declaration identifies the applicant as the employer or the successor in title of the inventor.

54. The Israeli Patent office while rejecting the Applications 268604 titled "Devices requiring augmented attention", and the second, number 268605 titled "Food Container" noted that there are currently no established rules for protecting inventions made by artificial intelligence, and most countries, including Israel, do not discuss the matter of patent registration for inventions made without human involvement. An English translation of the relevant excerpts from the Israeli Patent Office's decision is as provided below

> *"45. Currently, there are no established rules for protecting inventions made by artificial intelligence, and most countries, including Israel, do not discuss the matter of patent registration for inventions made without human involvement.*
>
> *46. Even if the applicant's position is correct and such machines should be incentivized to disclose their inventions, it is doubtful whether protecting such inventions in only a few countries would fulfill the objectives of intellectual property laws as the applicant argues. Without an international consensus on the desired regulation for this matter, it would not be appropriate to establish such a principle in Israeli law solely through judicial interpretation."*

55. It is submitted that the Applicant has filed appeals against refusal of his Patent Application in several jurisdictions. The matter has been heard in

prominent jurisdictions such as USA, UK, Australia and EPO and is currently under hearing in other jurisdictions.

56. On 24 April 2023, the Supreme Court of the United States declined to hear the appeal brought by the Applicant against the order of the United States Court of Appeals for the federal circuit (CAFC), affirming the ruling passed by CAFC. CAFC in its decision dated August 5, 2022 (Case No. 2021-2347) while rejecting the Applicant's invention held as follows:

> *"The sole issue on appeal is whether an AI software system can be an "inventor" under the Patent Act. In resolving disputes of statutory interpretation, we "begin[] with the statutory text, and end[] there as well if the text is unambiguous." BedRoc Ltd. v. United States, 541 U.S. 176, 183 (2004). Here, there is no ambiguity: the Patent Act requires that inventors must be natural persons; that is, human beings.*
>
> *The Patent Act expressly provides that inventors are "individuals." Since 2011, with the passage of the LeahySmith America Invents Act, the Patent Act has defined an "inventor" as "the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention." 35 U.S.C. § 100(f) (emphasis added). The Act similarly defines "joint inventor" and "coinventor" as "any 1 of the individuals who invented or discovered the subject matter of a joint invention." § 100(g) (emphasis added). In describing the statements required of an inventor when applying for a patent, the statute consistently refers to inventors and co-inventors as "individuals." See § 115.*
>
> *The Patent Act does not define "individual." However, as the Supreme Court has explained, when used "[a]s a noun, 'individual' ordinarily means a human being, a person." Mohamad v. Palestinian Auth., 566 U.S. 449, 454 (2012) (internal alteration and quotation marks omitted). This is in accord with "how we use the word in everyday parlance": "We say 'the individual went to the store,' 'the individual left the room,' and 'the individual took the car,' each time referring unmistakably to a natural person." Id. Dictionaries confirm that this is the common understanding of the word. See, e.g., Individual, Oxford English*

Dictionary (2022) (giving first definition of "individual" as "[a] single human being"); Individual, Dictionary.com (last visited July 11, 2022), https://www.dictionary.com/browse/individual (giving "a single human being, as distinguished from a group" as first definition for "individual"). So, too, does the Dictionary Act, which provides that legislative use of the words "person" and "whoever" broadly include ("unless the context indicates otherwise") "corporations, companies, associations, firms, partnerships, societies, and joint stock companies, as well as individuals." 1 U.S.C. § 1 (emphasis added). "With the phrase 'as well as,' the definition marks 'individual' as distinct from the list of artificial entities that precedes it," showing that Congress understands "individual" to indicate natural persons unless otherwise noted. Mohamad, 566 U.S. at 454.

Consequently, the Supreme Court has held that, when used in statutes, the word "individual" refers to human beings unless there is "some indication Congress intended" a different reading. Id. at 455 (emphasis omitted).4 Nothing in the Patent Act indicates Congress intended to deviate from the default meaning. To the contrary, the rest of the Patent Act supports the conclusion that "individual" in the Act refers to human beings.

….

Our holding today that an "inventor" must be a human being is supported by our own precedent. See Univ. of Utah v. Max-Planck-Gesellschaft zur Forderung der Wissenschaften E.V., 734 F.3d 1315, 1323 (Fed. Cir. 2013) ("[I]nventors must be natural persons and cannot be corporations or sovereigns.") (emphasis added); Beech Aircraft Corp. v. EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993) ("[O]nly natural persons can be 'inventors.'"). While these opinions addressed different questions – concluding that neither corporations nor sovereigns can be inventors – our reasoning did not depend on the fact that institutions are collective entities. The two cases confirm that the plain meaning of "inventor" in the Patent Act is limited to natural persons.

Statutes are often open to multiple reasonable readings. Not so here. This is a case in which the question of statutory interpretation begins and ends with the plain meaning of the text. See Bostock v. Clayton Cnty., 140 S. Ct. 1731, 1749 (2020) ("This Court has explained many times over many years, when the meaning of the statute's terms is plain, our job is at an end."). In the Patent Act, "individuals" – and, thus, "inventors" – are unambiguously natural persons. Accordingly, we have no need to consider additional tools of statutory construction. See Matal v. Tam, 137 S. Ct. 1744, 1756 (2017) ("[I]nquiry into the meaning of the statute's text ceases when the statutory language is unambiguous and the statutory scheme is coherent and consistent.") (internal quotation marks omitted).

…

We have considered Thaler's additional arguments and find they do not merit discussion.

When a statute unambiguously and directly answers the question before us, our analysis does not stray beyond the plain text. Here, Congress has determined that only a natural person can be an inventor, so AI cannot be. Accordingly, the decision of the district court is affirmed."

57. It is submitted that the Supreme Court of the United Kingdom while hearing an appeal [*Thaler v. Comptroller-General of Patents, Designs and Trade Marks, [2023] UKSC 49*] by the Applicant against the refusal to grant patent of his Application in UK, held that an inventor, for the purposes of the UK Patents Act (UK Act), must be a natural person, and that therefore an autonomous AI system cannot be named as inventor under the current provisions of the UK Act. Relevant excerpts from the court's ruling are provided below:

"54. The first issue concerns the scope and meaning of the term "inventor" in the 1977 Act and whether it extends to a machine such as DABUS.

56. I should say straight away that this issue has been decided against Dr Thaler at every level in these proceedings and by every judge who has considered it. Dr Thaler has argued throughout that the technical advances and the new products described and disclosed in the applications were devised by DABUS, and that DABUS was their

inventor. As I have indicated, the Comptroller accepts for the purposes of these proceedings the substance of the factual case advanced by Dr Thaler, namely that DABUS created or generated the technical advances described and disclosed in the applications and did so autonomously using AI, but the Comptroller has never accepted (and disputes any suggestion) that this renders DABUS an inventor within the meaning of the 1977 Act. 56. In my judgment, the position taken by the Comptroller on this issue is entirely correct. The structure and content of sections 7 and 13 of the Act, on their own and in the context of the Act as a whole, permit only one interpretation: an inventor within the meaning of the 1977 Act must be a natural person, and DABUS is not a person at all, let alone a natural person: it is a machine and on the factual assumption underpinning these proceedings, created or generated the technical advances disclosed in the applications on its own. Here I use the term "technical advance" rather than "invention", and the terms "create" or "generate" rather than "devise" or "invent" deliberately to avoid prejudging the first issue we have to decide. But it is indisputable that DABUS is a machine, not a person (whether natural or legal), and I do not understand Dr Thaler to suggest otherwise.

57. Section 130 of the 1977 Act provides that the term "inventor" has the meaning ascribed to it by section 7. As we have seen, section 7(3) provides that "inventor" in relation to an invention means the actual deviser of the invention. There is no suggestion that "deviser" here has anything other than its ordinary meaning, that is to say, a person who devises a new and non-obvious product or process (the invention) which is capable of industrial application and may be protected under the patent system.

…

DABUS is not an inventor

73. In all these circumstances the Comptroller was right to decide that DABUS is not and was not an inventor of any new product or process described in the patent applications. It is not a person, let alone a natural person and it did not devise any relevant invention. Accordingly, it is not

and never was an "inventor" for the purposes of section 7 or 13 of the 1977 Act.

74. The next question is whether Dr Thaler was nevertheless entitled to apply for and obtain a patent in respect of any technical advance made by DABUS and described in the patent applications.

75. Here Dr Thaler faces two formidable difficulties. The first is that DABUS, a machine with no legal personality, is not and has never been an inventor within the meaning of the 1977 Act. This is more than a formal objection. It goes to the heart of the system for granting a monopoly for an invention. The second is that Dr Thaler, on his own case, has no independent right to obtain a patent in respect of any such technical advance.

76. Notwithstanding these difficulties, Dr Thaler contends that he was entitled to file applications for and obtain the grant of patents for what he characterises as the inventions described and disclosed in each of these applications on the basis of his ownership of DABUS.

77. In my view this argument is without merit and fails to face up to and address any of the following problems. First, as we have seen, section 7 of the 1977 Act confers the right to apply for and obtain a patent and it provides a complete code for that purpose. As a starting point, under section 7(2)(a), there must be an inventor, and that inventor must be a person. DABUS was not and is not a person.

78. Secondly, the applicant, if not the inventor, must be a person falling within one of the limbs of section 7(2)(b) such that, in preference to the inventor, this person was, at the time of the making of the invention, entitled to the whole of the property in it (other than any equitable interest) in the United Kingdom. Alternatively, under section 7(2)(c), this person must be the successor in title to any person mentioned in paragraph (a) or (b).

79. In my opinion, Dr Thaler does not satisfy any part of this carefully structured code. Section 7 does not confer on any person a right to obtain a patent for any new product or process created or generated

autonomously by a machine, such as DABUS, let alone a person who claims that right purely on the basis of ownership of the machine. This fundamental premise of the 1977 Act is made explicit in section 7(2)(b) on which Dr Thaler relies, as the references to "the invention" are necessarily references to an invention devised by a person. Put another way, I agree with Elisabeth Laing LJ who said, at para 103 of the judgment of the Court of Appeal:

> *"Whether or not thinking machines were capable of devising inventions in 1977, it is clear to me that that Parliament did not have them in mind when enacting this scheme. If patents are to be granted in respect of inventions made by machines, the 1977 Act will have to be amended."*

…

87. In particular, Dr Thaler's reliance on the doctrine of accession in this context is misguided. The doctrine concerns new tangible property produced by existing tangible property. Dr Thaler contends that, upon the application of this doctrine, the owner of the existing property also owns the new property. In this way, the farmer owns the cow and the calf. By analogy, Dr Thaler continues, he, as owner of DABUS, is the owner of all rights in all developments made by DABUS.

88. We are not concerned here with a new item of tangible property produced by an existing item of tangible property, however. We are concerned with what appear (and which for present purposes we must assume) to be concepts for new and non-obvious devices and methods, and descriptions of ways to put them to into practice, all of which, so Dr Thaler maintains, have been generated autonomously by DABUS. There is no principled basis for applying the doctrine of accession in these circumstances.

89. For these reasons and those given by the Court of Appeal, I am satisfied that the doctrine upon which Dr Thaler relies here, that of accession, does not, as a matter of law, operate to confer on him the property in or the right to apply for and obtain a patent for any technical development made by DABUS.

90. It follows that, on the factual assumptions upon which this appeal is proceeding, Dr Thaler has never had any right to secure the grant to himself of patents under the 1977 Act in respect of anything described in the applications.

…

96. As I have explained, it is not the function of the UKIPO to investigate the correctness of an apparently genuine statement of fact by the applicant which indicates the derivation of his right to be granted the patent for which the application is made. But that does not mean to say that the UKIPO is powerless to intervene where that indication is obviously defective or insufficient. That would be to disregard the requirement imposed by section 13(2)(b) of the 1977 Act. So, for example, in the Nippon Piston Ring case, there had been a failure to identify whether the applicant relied on section 7(2)(b) or (c) of the 1977 Act. That was not permissible. Nor would it have been permissible simply to rely on an assignment from A to B when the application was made by C.

97. Again, it seems to me that the Hearing Officer came to the right conclusion in respect of this second limb of section 13(2). Dr Thaler asserted that it was enough that he owned DABUS. For the reasons I have given, that was not correct. Here too there was nothing to investigate because the key assertion of fact made by Dr Thaler, namely that he owned DABUS at all relevant times, was assumed to be true. The question then was one of law: did this, of itself, provide a proper basis for accepting the application? The answer was that it did not.

98. Accordingly, Dr Thaler did not satisfy either of the requirements in section 13(2), and it necessarily follows that I do not agree with the reasoning of Birss LJ so far as it led him to a different conclusion. The inevitable consequence was and remains that the applications must now be taken to have been withdrawn. This is not to impose an additional requirement for patentability; nor does it introduce a new ground for refusing patent applications. It is the consequence prescribed by section 13(2) if the applicant fails within the relevant period to file with the UKIPO a statement identifying the person or persons whom he believes to be the

inventor or inventors; and where, as here, the applicant is not the inventor, indicating the derivation of his right to be granted the patent.

Overall conclusion

99. For all of these reasons, I am satisfied the Comptroller was right to find the applications would be taken to be withdrawn at the expiry of the sixteen-month period specified by rule 10(3). The judge and the majority of the Court of Appeal made no error in affirming that decision and in finding that the applications are now deemed to have been withdrawn. I would dismiss this appeal.

58. It is submitted that the High Court of Australia dismissed an appeal [*Stephen Thaler v. Commissioner of Patents, [2022] HCATrans 199*] by the Applicant against the decision of the Federal Court of Australia [*Commissioner of Patents v Thaler [2022] FCAFC 62*] issued on April 13, 2022. The Federal Court in its ruling held as follows:

"119 First, in filing the application, Dr Thaler no doubt intended to provoke debate as to the role that artificial intelligence may take within the scheme of the Patents Act and Regulations. Such debate is important and worthwhile. However, in the present case it clouded consideration of the prosaic question before the primary judge, which concerned the proper construction of s 15 and reg 3.2C(2)(aa). In our view, there are many propositions that arise for consideration in the context of artificial intelligence and inventions. They include whether, as a matter of policy, a person who is an inventor should be redefined to include an artificial intelligence. If so, to whom should a patent be granted in respect of its output? The options include one or more of: the owner of the machine upon which the artificial intelligence software runs, the developer of the artificial intelligence software, the owner of the copyright in its source code, the person who inputs the data used by the artificial intelligence to develop its output, and no doubt others. If an artificial intelligence is capable of being recognised as an inventor, should the standard of inventive step be recalibrated such that it is no longer judged by reference to the knowledge and thought processes of the hypothetical uninventive skilled worker in the field? If so, how? What continuing role

might the ground of revocation for false suggestion or misrepresentation have, in circumstances where the inventor is a machine?

120. Those questions and many more require consideration. Having regard to the agreed facts in the present case, it would appear that this should be attended to with some urgency. However, the Court must be cautious about approaching the task of statutory construction by reference to what it might regard as desirable policy, imputing that policy to the legislation, and then characterising that as the purpose of the legislation: Deal at [37]; Miller v Miller [2011] HCA 9; 242 CLR 446 at [29] (French CJ, Gummow, Hayne, Crennan, Kiefel and Bell JJ). It would appear that this was the approach favoured by the primary judge.

121. Secondly, we do not accept the premise of the proposition, accepted by the primary judge and apparently influential in his reasoning, that if DABUS is not accepted to be an inventor, no invention devised by an artificial intelligence system is capable of being granted a patent. In the present case, it was said to be an agreed fact that DABUS is the inventor of the invention the subject of the application and that Dr Thaler is not. However, the characterisation of a person as an inventor is a question of law. The question of whether the application the subject of this appeal has a human inventor has not been explored in this litigation and remains undecided. Had this question been explored, it may have been necessary to consider what significance should be attributed to various matters including the (agreed) facts that Dr Thaler is the owner of the copyright in the DABUS source code and the computer on which DABUS operates, and that he is also responsible for the maintenance and running costs.

122 Finally, we note that the outcome in the present case is the same as the outcome of the Court of Appeal in Thaler UK. Whilst there are important aspects of the reasoning of the learned judges in that Court with which we respectfully agree, we consider that the task in the present case focusses on the particular statutory language of the Patents Act, which in material respects differs from that in the equivalent patents legislation in the United Kingdom.

8. DISPOSITION

123 For the reasons set out above we consider that the first ground of the appeal must succeed with the consequence that the appeal should be allowed. We do not consider that it is necessary to consider the second. The result is that the decision of the primary judge should be set aside and the orders made by the Deputy Commissioner reinstated. The Commissioner accepts that it is appropriate in the circumstances of this case that there be no order as to costs."

59. It is submitted that the EP board of appeals refused the Applicant's invention in its decision [*Decision No. J 0008/ 20 - 3.1.01*] dated December 21, 2021. The relevant excerpts from the decision of the EP board of appeals are provided below:

"4.2 Legal framework

The application has been rejected because the inventor's designation did not comply with Article 81, first and second sentence, and Rule 19 EPC. However, further provisions are relevant for the assessment of the appeal as well as for the reasoning of the decision under review. These are discussed below.

4.2.1 Article 81 EPC

According to Article 81 EPC "[t]he European patent application shall designate the inventor" (first sentence); where the applicant is not the inventor or is not the sole inventor "[t]he designation shall contain a statement indicating the origin of the right to the European patent" (second sentence). This obligation for the applicant is complementary to the right of the inventor, set out in Article 62 EPC, to be mentioned as such before the EPO.

To implement these provisions, Rule 20 EPC provides that "[t]he designated inventor shall be mentioned in the published patent application and the European patent specification, unless the inventor informs the European Patent Office in writing that he has waived his right to be mentioned". Under Rule 21 EPC, "[a]n incorrect designation of an inventor shall be rectified upon request and only with the consent of

the wrongly designated person". Where such a request is filed by a third party, the consent of the applicant or the proprietor of the patent is required. Provisions to the same effect were already included in the implementing regulations to the EPC 1973.

It follows from the wording of Article 81 and the aforementioned secondary legislation that the designation of the inventor is a mandatory requirement of the application. However, the inventor is not mentioned in the publication if they ask not to be. The statement on the origin of the right to the invention is in turn an integral part of the designation of inventor, but only where applicant and inventor are not the same person.

Article 81, second sentence, EPC does not require a generic explanation as to why an applicant, who is not the inventor, is entitled to file a European patent application. The provision is more specific: it refers to the "origin of the right to the European patent". In this way, by its very wording, Article 81 EPC establishes a link to Article 60 EPC, where the right to a European patent is mentioned and provided for.

4.2.2 Article 60 (1) EPC

Under Article 60(1), first sentence, EPC, "[t]he right to a European patent shall belong to the inventor or his successor in title". According to Article 60(1), second sentence, EPC, "[i]f the inventor is an employee, the right shall be determined in accordance with the law of the State in which the employee is mainly employed". Default rules are provided in Article 60(1), third sentence, EPC, for the case where this State cannot be determined.

Article 60(1) EPC is a stand-alone substantive provision of the EPC and fulfils three functions.

Firstly, it creates the right to the European patent; secondly, it vests this right in the inventor; finally, it provides for the separate transferability of the right even before a European application is filed.

Article 60(1) EPC envisages two ways to acquire the right to a European patent: the first is to develop the invention ("inventor"), and the second is to derive the right from the inventor after an invention has been made ("successor in title").

Both the concepts of inventor and successor in title are notions of the EPC; they must be interpreted uniformly and autonomously. While the concept of inventor does not require any support from domestic legislation, the concept of successor in title implies an interaction with national law. Indeed, the EPC has not established a comprehensive, self-sufficient legal order and private law. This does not mean that Article 60(1) EPC constitutes a pure reference to national legislation devoid of any content. "Successor in title" has an ordinary meaning under Article 31(1) of the Vienna Convention on the Law of Treaties (1969) ("VCLT"): it refers to a situation where a pre-existing right goes from one subject (the legal predecessor; see also Article 55(1)(a) EPC) into the sphere of another (the legal successor, Article 60(1) EPC). National law governs the question of whether the transfer is valid or has occurred by operation of a contract, inheritance or other rules of law. Since the EPC is silent on the matter with the exception of employment relationships, a national court seized with the issue will identify the applicable rules according to their domestic conflict of laws-provisions (van Empel, The Granting of European Patents, Leiden 1975, 81; Ubertazzi, Profili soggettivi del brevetto, Milano 1985, 281; Cronauer, Das Recht auf das Europaische Patent, 1988, Koln et al, 105) .

However, when national courts decide on entitlement under the Protocol on Jurisdiction and the Recognition of Decisions in respect of the Right to the Grant of a European Patent, they must apply Article 60(1) EPC and not the provisions governing entitlement to national patents. Therefore, even if, e.g., UK or Australian law provided for other forms of acquiring originally or deriving the right to the patent (such as possession) and these forms went beyond the scope of Article 60(1) EPC, as suggested by the appellant, these rules would apply to domestic applications, but not to European patents, the right to which is attributed to the subjects listed in Article 60(1) EPC and no one else.

In view of the normative link between Article 60(1) and Article 81 EPC, not just any declaration, irrespective of its content, can be considered to comply with the EPC. It must be one which identifies the origin of the right in a manner consistent with Article 60(1) EPC. This is the case

where the declaration identifies the applicant as the employer or the successor in title of the inventor.

60. It is submitted that Patent offices across the world and the courts of law in almost all major jurisdictions have held that DABUS cannot be an inventor as required under law since DABUS does not adhere to the definition of a "person" as provided under existing laws. Most patent laws, as interpreted by various patent offices and courts, explicitly or implicitly define an inventor as a human. Furthermore, the above decisions clearly indicate that legal frameworks around the world currently do not recognize entities as DABUS capable of holding patents because they cannot be equated with human inventors who can possess legal rights and obligations.

G. **CONCLUSION**

The Opponent humbly submits that the Invention that is the subject of the Impugned Application is not patentable in India because:

(i) Personhood has not been extended in India to machines, technologies, or artificial intelligence tools like DABUS;

(ii) The meaning of the 'Person' under the Patents Act does not include non-human entities such as DABUS for purposes of determining true and first inventorship;

(iii) The statutory provisions in the Indian Patents Act clearly require a 'true and first inventor' to be a human being;

(iv) The patent system in India has been framed to promote progress of science and technology by incentivising human invention and does not envisage protection of inventions created by machines, technologies or tools; and

(v) In several countries and regions including the likes of UK, the United States, Europe and Australia, courts have held that a non-human entity cannot be an inventor in a patent application.

H. PRAYER

Based on the submissions in this representation, the Opponent humbly prays as follows:

1. The Impugned Application be refused as it does not comply with requirements of the Patents Act, and inventions made by non-human inventors are not patentable in India; and

2. The costs of these proceedings be awarded to the Opponent.

The Opponent further prays for leave to modify, amend and/ or add to or alter any of the foregoing grounds and reasons if required.

The Opponent also prays for an opportunity of hearing before an adverse decision is made in this pre-grant representation.

Thanking You
Yours Sincerely

Dr. Kalyan C. Kankanala.