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Issue in AI technology

1- Sensor data and subject matter

- a) Most of the cases AI technology uses sensor variations or wave data as input for the arithmetic or algorithm building. A subset of software codes searching for matching commands to make valid decisions. Here, the subject matter of patent eligibility has to be analysed. Whether software commands based on sensor data is eligible for patent subject matter?
- b) In AI technology, most of the times uses combination of two sets of data which are sensor generated data and a database of commands and required action. Can multiple technologies of these kinds when used combinations are patent eligible?

(Eg; a car sensor producing data of an obstruction in 5 meter and a database of commands instructs the braking system. Here the sensor data is coupled with the data base of commands. AI system uses some software codes to search and match the required action. So a searching and matching cannot be considered as a subject matter for patent eligibility.)

- c) Since AI technology works on sensor integration and algorithms it works as an umbrella of group innovations (in every fields of technology). So it may act as blocking of patents for further innovation if granted.
- d) AI technology uses different data bases for matching with commands for that it is using commands of copyrighted works (software). The issue of these copyrighted commands and ownership of those copyrighted software codes need to address before AI gets patented.

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ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY

PATENTABILITY OF AI RELATED PATENTS- COMBINATION OF SENSOR INTEGRATION AND AI SOFTWARE

Are AI related inventions being combination of existing technologies (Sensor technology, AI software/algorithms for processing), patentable? What is the inventive step involved?

1. AI related inventions mostly involve combination of sophisticated sensors to collect real time data of the environment which is processed by any AI software to perform any action of desired nature. What is the inventive step in the invention? Is this an eligible subject matter of patentability?

(Eg., In autonomous vehicles, LiDAR sensor (patent eligible subjectmatter) information of an obstacle is sent to the processing unit of the vehicle, where, with the predefined instructions and with the input data from the LiDAR sensor, AI software/algorithms (non-patentable subjectmatter) act accordingly to perform a function, say, applying brakes or reducing speed of the vehicle)

a) Combination of existing technologies used in combination to achieve an innovative function of this kind is not a patent eligible subjectmatter when the components are already patented. Inventive step involved in combining two technologies is questionable. It is the efficiency of the input data sets of external conditions determines the efficiency of functions performed by the AI using AI software/algorithms. Collecting on a real-time basis, more diverse and high in quantity the datasets are, more efficient the function of AI. Thus, sensors have an upper hand in AI related inventions. Patenting of AI related inventions thus in effect patents the sensor technology, that is already patented or already in the public domain. This clearly questions the inventive step in the invention.

2. Combination of existing technologies used in combination to achieve an innovative function of this kind when patented may create blocking patents.

(eg. Similar sensors and AI software in vehicle automation may be used in industrial automation. Patenting of one may block innovation in the other)

-Method patents may however be justified in this realm.