Government of India

Controller General of Patents, Designs & Trade Marks
Ministry of Commerce & Industry
Department of Industrial Policy and Promotion

E-Request for
EXPRESSION OF INTEREST (EOI)

for
Making use of Artificial Intelligence, Blockchain, IoT and
other latest technologies in Patent Processing system of

IPO

No. IPO/POD/EOI/2018/1       Dated: 02/08/2018

Controller General of Patents, Designs & Trade Marks
The Patent Office, Boudhik Sampada Bhawan,
Sector 14, Plot 32, Dwarka, New Delhi-110075
Phone: 011-25300200, Fax: 011-28034301
Email: delhi-patent@nic.in
Contents
1. Notice Inviting EOI........................................................................................................... 3
2. Definitions & abbreviations............................................................................................ 4
3. Introduction.................................................................................................................... 5
4. Expression of Interest (EOI).......................................................................................... 7
5. Objective of the EOI ...................................................................................................... 7
6. Critical Information....................................................................................................... 8
   a) Name of the Purchaser: .......................................................................................... 8
   b) Address for downloading the EOI document: ....................................................... 8
   c) Schedule of Activities ............................................................................................ 8
7. Scope of Work............................................................................................................... 8
8. Submission of EOI......................................................................................................... 9
9. Existing work flow at Patent Office.............................................................................. 9
10. Evaluation Process and Way Forward ....................................................................... 9
11. Eligibility Criteria ...................................................................................................... 10
13. Queries ....................................................................................................................... 11
14. Responses & Corrigendum ....................................................................................... 12
15. Amendment of EOI Document: ............................................................................... 12
16. Disclaimer .................................................................................................................. 13
17. Proposal Preparation Costs & Related Issues ......................................................... 13
18. Instructions to interested parties/vendors ................................................................ 13
   a) General Instructions .............................................................................................. 13
   b) EOI document: ....................................................................................................... 14
19. Annexure I.................................................................................................................. 15
20. Annexure II............................................................................................................... 16
21. Annexure III .............................................................................................................. 17
22. Annexure IV .............................................................................................................. 18
Notice Inviting Expression of Interest (EOI) for Making use of Artificial Intelligence, Blockchain, IoT and other latest technologies in Patent Processing system of IPO

The office of Controller General of Patents, Designs and Trademarks (CGPDTM), under Department of Industrial Policy and Promotions, Ministry of Commerce and Industry, Government of India, is responsible for administration of all major IPR legislations in the country viz. Patents, Designs, Trademarks, Geographical Indications, Copyrights and Semiconductor Integrated Circuits Layout-Design.

Office of CGPDTM intends to make use of Artificial Intelligence, Blockchain, IoT and other latest technologies in Patent Processing system of IPO. While the IP communities across the globe are concerned about devising appropriate IP laws to protect these emergent technologies, the true potential of these latest technologies need to be leveraged in IP regime itself by utilizing their mettle to address issues ranging from inception of a possible IP to its enforcement. These latest technologies may be used in wide ranging applications like re-engineering processes of prosecution, protection of IPRs, their enforcement.

CGPDTM therefore invites Expression of Interest (EoI) from agencies / companies, both national and international, desirous of and having proven track record of having conducted and executed similar tasks.

a) The EOI document containing the details is uploaded on the website http://www.ipindia.nic.in or http://eprocure.gov.in.

b) Interested Agencies / Companies who meet the criteria may furnish their Expression of Interest in accordance with the instructions contained in this document accompanied by all the necessary documents duly signed by an authorized signatory.

c) The Expression of Interest may be submitted on or before 30th August 2018 by 16:00 hrs at the e-portal of CPP.

d) Office of CGPDTM shall not be responsible for any postal delay or non-receipt / non-delivery of the documents. No further correspondence on the subject will be entertained.

e) The office of CGPDTM reserves the right to accept/ reject one or all EOIs or stop the process of approval at any stage, at its sole discretion without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.
1. Definitions & abbreviations

(i) 'Act' means the Patents Act, 1970.

(ii) 'Applicant' means a domestic or foreign or multinational Firm / Company / Organization / making a proposal in response to this EOI.

(iii) 'CGPDTM' means the Controller General of Patents, Designs and Trade Marks.

(iv) ‘CPP’ means Central Procurement Portal

(v) ‘IoT’ means Internet of Things

(vi) 'IPO' means Indian Patent Office including branch offices. CGPDTM and IPO shall be used interchangeably in this document.

(vii) 'IPEA' means the International Preliminary Examining Authority.

(viii) 'ISA' means the International Searching Authority.

(ix) 'ISP' means an Integrated Search Platform.

(x) 'LoA' means Letter of Acceptance.

(xi) 'NPL' means Non Patent Literature.

(xii) 'Patent Family' means a group of patents related by priority numbers claimed. These patents are related, and often protect the same invention in different countries.

(xiii) 'PCT' means the Patent Cooperation Treaty.

(xiv) 'PL' means Patent Literature.

(xv) 'Patent Number' means a reference number identifying a patent.

(xvi) 'Priority Number' means the application number from which priority rights are claimed.

(xvii) 'Proposal' means the proposal submitted by an Applicant in response to this EOI.

(xviii) 'EOI' means the present Expression of Interest.
2. Introduction
2.1 The office of Controller General of Patents, Designs and Trademarks (CGPDTM), under Department of Industrial Policy and Promotions, Ministry of Commerce and Industry, Government of India, is responsible for administration of all major IPR legislations in the country viz. Patents, Designs, Trademarks, Geographical Indications, Copyrights and Semiconductor Integrated Circuits Layout-Design. In the recent times, the Government of India has taken many concrete steps to establish favourable milieu for creation and protection of Intellectual Property Rights and strengthening IP administration in the country. The National IPR Policy was launched by the Government of India on 12th May 2016, which lays down seven objectives including Administration and Management of IPRs. It endeavours to promote stable IP regime in the country and encourages innovation to achieve the country’s industrial and economic development goals. The Office has taken necessary steps to implement the objectives of National IPR Policy including strengthening IPR management and ensuring ease of access to IP system for all stakeholders.

2.2 The CGPDTM is responsible for the administration of the Patents Act, 1970. Consequent to India’s accession to the World Trade Organization in 1995, the intellectual property laws were amended/re-enacted in order to meet the obligations under the TRIPS Agreement. The Patents Act 1970 was amended in 1999, 2002 and 2005. India also became the Member of Patent Cooperation Treaty (PCT) and the Paris Convention for the protection of Industrial Property in 1998. In 2007 India acquired the status of International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA) under the PCT and is now also discharging functions as an ISA / IPEA.

2.3 Several steps have been taken for enhancing efficiency, uniformity and consistency in processing of IP applications, strengthening transparency,
dissemination of IP related information, nurturing bilateral cooperations at the international level and building up IP awareness among the public.

2.4 Reengineering of IP procedures and reforms in IPO administration have been implemented which include, auto allocation of patent applications for examination across all patent offices to remove disparity in time of examination in similar field of technology, complete electronic processing of Patents and Trademarks applications through specialized modules, dynamic utilities for stage-wise real-time information of patent and trademark applications, e-mail communication by IP offices to stakeholders, online generation of certificates of grant of patent and registration of trademark and sending it to the applicant or his agent through e-mail, redesigning of IPO website for improved contents, real-time IP information and ease of access and making it more interactive, informative and easy to navigate.

2.5 With the objective of improving functioning and service delivery of the office and resolve public grievances more speedily and effectively, many initiatives have been implemented, which include; (i) launching SMS Alert service to stakeholders regarding Examination reports and time-bound actions to be taken by them, (ii) publishing Periodic List of First examination Reports (FER) issued in the Patent Office E-journal on IPO website so as to enable all stakeholders to know the status of issuance of FER online, (iii) introducing the facility for e-verification of signature in addition to the present mode of digital signature to make online filing easier and more user-friendly, (iv) introducing updated facility for hearing with the Controller through Video-conferencing from the applicant’s office and (v) developing Mobile App service for providing IP-information and service to stakeholders.

Thus, the office of CGPDTM has also been a front runner in keeping pace with the latest technological developments.

2.6 Modern era is an era of disruptive technologies which are rapidly evolving and changing the way we live and conduct business. Artificial Intelligence, Cloud Computing, Virtualization, Internet of Things, Blockchain, Deep Learning etc., have become buzz words giving an ever widening canvass of technological developments. In recent past, the government of India has been very keen on transforming its economy to digital economy.
Various steps have been undertaken by the government to adopt and enhance the use of latest technologies. As a premier think-tank of the Government of India, National Institution for Transforming India (NITI) Aayog is exploring the use of blockchain and Artificial Intelligence (AI) in diverse areas such as education, healthcare, agriculture, electricity distribution and land records. The institution is exploring a platform called ‘IndiaChain’ – a blockchain-enabled infrastructure for Indian enterprise and government. Once implemented this will be world’s largest blockchain implementation program in governance. Further, NITI Aayog has released a discussion paper on National Strategy for Artificial Intelligence in June, 2018 which envisages to establish a decentralized data marketplace that is based on blockchain technology.

2.7 While the IP communities across the globe are concerned about devising appropriate IP laws to protect these emergent technologies, the true potential of these latest technologies need to be leveraged in IP regime itself by utilizing their mettle to address issues ranging from inception of a possible IP to its enforcement. These latest technologies may be used in wide ranging applications like re-engineering processes of prosecution, protection of IPRs, their enforcement and promotions.

3. Expression of Interest (EOI)

The office of the Controller General of Patents, Designs and Trade Marks invites interested eligible parties to submit their proposals for “making use of Artificial Intelligence, Blockchain, IoT and other latest technologies in Patent Processing system of IPO”.

4. Objective of the EOI

The purpose of this exercise is to seek proposals for shortlisting of the vendors who are capable of implementation of Artificial Intelligence, Blockchain, IoT and other latest technologies in Patent Processing system of IPO to augment and enhance the speed, efficiency and productivity in the processing of applications. Based on the proposals received, IPO will analyze the usefulness of various solutions proposed and shortlist the vendors for the purpose of hosting a limited tender among the shortlisted vendors to implement the solutions selected by IPO.
5. Critical Information

a) Name of the Purchaser:
President of India through the “Controller General of Patents, Designs and Trade Marks”.

b) Address for downloading the EOI document:
The EOI document containing the details can be downloaded from http://www.ipindia.nic.in or http://eprocure.gov.in.

c) Schedule of Activities

<table>
<thead>
<tr>
<th>S.No</th>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Availability of EOI document at <a href="http://eprocure.gov.in">http://eprocure.gov.in</a>, <a href="http://www.ipindia.nic.in">www.ipindia.nic.in</a></td>
<td>02/08/2018</td>
</tr>
<tr>
<td>2</td>
<td>Last date for receiving queries</td>
<td>07/08/2018</td>
</tr>
<tr>
<td>3</td>
<td>Date for issuing clarifications</td>
<td>14/08/2018</td>
</tr>
<tr>
<td>4</td>
<td>Pre Bid meeting &amp; presentation by IPO for understanding of IPO processes</td>
<td>14/08/2018 11:00 AM</td>
</tr>
<tr>
<td>5</td>
<td>Issuance of addendum to EOI document, if any</td>
<td>17/08/2018</td>
</tr>
<tr>
<td>6</td>
<td>Last date for submission of proposals on eProcurement portal</td>
<td>30/08/2018 04:00 PM</td>
</tr>
<tr>
<td>7</td>
<td>Opening of Eligibility Technical bids and Evaluation on eligibility criteria and Technical Proposal</td>
<td>31/08/2018 11:00 AM</td>
</tr>
<tr>
<td>8</td>
<td>Technical demo by the selected vendors</td>
<td>after evaluation of technical proposal</td>
</tr>
</tbody>
</table>

Note: 1. Proposals are required to be submitted only through electronic bid on e-procurement portal (http://eprocure.gov.in)

2. No bids shall be accepted in hard copy or in any other form including email.

6. Scope of Work
The Agency shall primarily be required to submit the proposal for application of Artificial Intelligence/Blockchain/Internet of Things and other latest technologies and execution of the same to expedite and strengthen the processes of IPO in order to enhance the speed, efficiency and quality of the work. The proposal should be based in the areas as suggested in Annexure IV. However, the vendor is expected to explore further avenues to include the areas incidental to the work
defined in the said annexure.

7. Submission of EoI

(a) Proposals are required to be submitted only through electronic bid on e-procurement portal (http://eprocure.gov.in). No bids shall be accepted in hard copy or in any other form including email.
(b) Applicant shall enclose supporting proofs and documents as will be necessary to prove the eligibility of the applicant to be considered for the award of work.

8. Existing work flow at Patent Office

The Patent Office process the patent application for grant of patent under the provisions of The Patents Act 1970 and the Patents Rules 2003. The processing of applications is divided into various section of the office namely.

i. Receipt, EDP, Classification & Screening (RECS) section
ii. Record Management & Information Dissemination (RMID) section
iii. Examination section
iv. General Patent Matters (GPM) section

Following are the different stages through which the patent applications travel:

a) Application filing
b) Electronic Data Processing
c) Classification
d) Screening
e) Publication
f) Allotment (automated)
g) Prior art searching
h) Examination – formal and substantive
i) Pre-grant Opposition(s), if any
j) Hearings, if required
k) Disposal (Grant, Refusal, Abandon, Withdrawal)
l) Post grant Oppositions, if any
m) Renewal of Patent, if Granted
n) Post grant amendments in Patent E-register, if any

Patent applications move from one stage to another based on the processing inputs at each stage. Almost entire work flow is electronic and is done in the role based application software modules developed in-house.

9. Evaluation Process and Way Forward

(a) This EOI is an endeavor to generate competition and receive an expression
of interest from interested vendors by following an openly advertised competitive shortlisting process, thereby giving equal opportunity to all interested vendors to be considered for shortlisting. The interested vendors will be shortlisted based on the evaluation criteria given in this document.

(b) In the second stage, a Request for Proposals (RFP) containing Technical and Financial Bids will be invited from such shortlisted vendors in order to select the successful vendor.

(c) Office of CGPDTM will constitute an Evaluation Committee to evaluate the proposal of the applicants.

(d) The Evaluation Committee constituted by Office of CGPDTM shall evaluate the proposal to the EOI and all supporting documents & documentary evidence. The committee may seek additional documents as it deems necessary.

(e) The decision of the Evaluation Committee in the evaluation of proposals to the Expression of Interest shall be final. No correspondence will be entertained outside the evaluation process of the Committee.

(f) The shortlisted eligible vendors will be required to demonstrate technology and its use before they can be allowed to participate in subsequent stages of bidding process.

(g) The Evaluation Committee reserves the right to reject any or all proposals.

10. Eligibility Criteria

The invitation of bids is open to all entities registered in India as well as abroad, who fulfill the criteria as specified below:

(a) The interested vendor should be a legal entity recognized under Indian laws and in case of a foreign company, should be registered under the laws of such foreign country and authorized to participate in Government of India bidding process by the competent authority in India.

(b) The said legal entity should have been in existence for a period of at least 3 years on the date of submission of proposal as evidenced by the documents submitted by such entity in its proposal.

(c) The Agency should have a turnover of not less than Rs. 10 Crore in the preceding three years. Turnover is defined as sale proceeds as per audited Profit & Loss account of the entity, submitted for last three
financial years. The copies of income tax returns for preceding three years should also be submitted along with.

(d) Agencies should have experience and proven track record of having conducted similar studies. A statement of work done or such projects undertaken in last three years need to be submitted with EoI.

11. **Evaluation Criteria:**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Criteria</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Qualification criteria and their weightages</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sub-criteria</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Past experience in similar projects (track record)</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>• Number of years' relevant experience</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>• Past experience of completing work of similar nature</td>
<td>70%</td>
</tr>
<tr>
<td>2</td>
<td>General profile of qualification, experience and number of key staff (not individual CVs)</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>• Qualifications</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>• Number of employees</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>• Relevant experience</td>
<td>60%</td>
</tr>
<tr>
<td>3</td>
<td>Overall financial strength in terms of turnover, profitability and cash flow (liquid assets) situation</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Turnover figure for last three years</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Net profit figure for last three years</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>Accreditation and Certifications</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>100%</td>
</tr>
</tbody>
</table>

a) In order to qualify for shortlisting a vendor has to secure a minimum 60% marks.

b) In case the sufficient number (not less than 3) of vendors do not qualify for shortlisting, the evaluation committee may take an appropriate decision as may deem fit.

12. **Queries**

a) All enquiries / clarifications from the Applicants, related to this EOI, must be directed in writing exclusively to the contact person(s) notified in 2 a (iii) above within the prescribed time period. Enquiries received after the due date shall not be entertained.
b) The mode of delivering questions is through e-mail only. No other mode of query shall be entertained.

The queries may be raised in the following format.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Page</th>
<th>Clause of the EOI</th>
<th>Clarification required</th>
</tr>
</thead>
</table>

All the queries and their reply shall be published on the official website of the CGPDTM. No individual reply will be send to the interested vendor.

13. **Responses & Corrigendum**

a) After issuance of the EOI, Office of CGPDTM will begin accepting written questions from the applicants. Office of CGPDTM will endeavour to provide timely response to all queries. However, Office of CGPDTM makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does Office of CGPDTM undertake to answer all the queries that have been posed by the applicants. The responses to the queries from all Applicants will be posted online on [www.ipindia.gov.in](http://www.ipindia.gov.in) as per schedule mentioned above.

b) At any time prior to the last date for receipt of EOI, Office of CGPDTM may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective applicant, modify the EOI document by a corrigendum.

c) The corrigendum (if any) shall be posted at [www.ipindia.gov.in](http://www.ipindia.gov.in) / [http://eprocure.gov.in](http://eprocure.gov.in)

d) Any such corrigendum shall be deemed to be incorporated into this EOI.

e) In order to provide prospective applicants reasonable time for taking the corrigendum into account, Office of CGPDTM may, at its discretion, extend the last date for the receipt of EOI proposals which shall again be notified online through the portal [www.ipindia.gov.in](http://www.ipindia.gov.in).

14. **Amendment of EOI Document:**

The office of CGPDTM reserves the right to amend this EOI document by issuing addendum/ addenda on the date as mentioned in para4 (d) of Schedule. The addenda will be posted at the website of CGPDTM and shall be treated as a part
15. Disclaimer
   (i) This Expression of Interest (EOI) is not an offer by the Office of the Controller General of Patents, Designs and Trade Marks but an invitation to receive offers from interested parties. The purpose of this EOI is to provide the necessary information that may be useful to such interested parties in formulating their proposals in response to this EOI.

   (ii) No contractual obligation whatsoever shall arise from the EOI process unless and until a formal contract is signed and executed between the Office of the Controller General of Patents, Designs and Trade Marks and the selected party.

   (iii) Office of the Controller General of Patents, Designs and Trade Marks reserves the right to modify or even not to proceed with the proposed EOI at any stage.

16. Proposal Preparation Costs & Related Issues
   (a) The Applicant is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in preparation of proposal, participation in meetings / discussions. Office of CGPDTM in no case will be responsible or liable for these costs, regardless of the conduct or outcome of the EOI process.

   (b) This EOI does not commit office of CGPDTM to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award or for preparing this EOI.

   (c) All materials submitted by the Applicants will become the property of office of CGPDTM and may be returned completely at its sole discretion.

17. Instructions to interested parties/vendors

   a) General Instructions
      (i) This EOI is not an offer by Controller General of Patents, Designs and Trademarks but an invitation to receive proposals only from short listed
bidders in respect of the above-mentioned project. The EOI does not commit Controller General of Patents, Designs and Trademarks to enter into a binding agreement in respect of the project with the short listed vendors.

(ii) The Interested parties are expected to examine all instructions, terms, project requirements and other information in the EOI documents. Failure to furnish all information required as mentioned in the EOI documents or submission of a proposal not substantially responsive to the EOI documents in every respect will be at the bidder's risk and may result in rejection of the proposal and forfeiture of the bid security.

(iii) In case of need of any clarification, a query may be forwarded to the email: tenderenquiry.ipo@gov.in with subject of email as “Query w.r.t. EOI for Use of Artificial Intelligence in Patent processing of IPO”

(iv) CGPDTM’s decision with regard to the selection of parties through this EOI shall be final and CGPDTM reserves the right to reject any or all the bids without assigning any reason.

(v) Each interested vendor shall submit a comprehensive proposal along with a write up describing its strengths as to why it considers itself suitable and fit for work.

(vi) Office of CGPDTM will constitute an Evaluation Committee to evaluate the proposal of the interested vendors, which will evaluate the proposals received in response to the EOI and all supporting documents & documentary evidence. The committee may seek additional documents as it deems necessary. Each of the proposal shall be evaluated to validate competence of the applicant according to the supporting documents specified in this document.

b) EOI document:

- The EOI document may be downloaded free of cost from http://eprocure.gov.in, or http://www.ipindia.gov.in
18. **Annexure I**

Covering Letter on Letterhead of the Applicant

---

<Location, Date>

To,

............

............

............

............

Kind Attn. - Sh.

Dear Sir / Madam,

We, the undersigned, offer to provide our services to carry-out the work as envisaged in the .

We are hereby submitting our Expression of Interest. We understand you are not bound to accept any proposal you receive.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading, we are liable to be dismissed from the EOI selection process or termination of the contract during the project.

We agree to abide by the conditions set forth in this EOI.

We hereby declare that our proposal submitted in response to this EOI is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Sincerely,


<Applicant’s Name with seal>

Name: <<Insert Name of Contact>>

Title: <<Insert Title of Contact>>

Signature: <<Insert Signature>>
19. **Annexure II**

**GENERAL INFORMATION**

1. Name of the firm: …………………………………………………………………

(Attach an attested photocopy of Certificate of Registration.)

2. Legal Status of the Firm: Individual/Association/Joint Venture/Consortium

3. PAN/TAN Number:

4. Registered Address, telephone, Tele-fax.

………………………………………………………………

………………………………………………………………

………………………………………………………………

5. Contact Person, Designation and Address including email ID

………………………………………………………………

………………………………………………………………

………………………………………………………………

6. Length of experience in providing such solution / services: Please provide details of the similar contracts awarded and completed.

7. In case the company is subsidiary, the involvement, if any, of the Parent Company in the services:

8. Has the applicant or any constituent partner in case of partnership firm, ever been debarred/black listed for competing in any organization at any time? If so, give details.

9. Has the applicant or any constituent partner in case of partnership firm, ever been engaged in a dispute / dispute settlement mechanism / arbitration / mediation with any of its clients at any time? If so, give details

Certified that the information furnished/ given above is true and correct to the best of my knowledge. In case, it is found wrong/misrepresentation of facts, I have no objection for my technical bid to be rejected.

Signature of the Authorized representative
20. **Annexure III**

**Financial Capability**

<table>
<thead>
<tr>
<th>Financial information in INR/US$ equivalent</th>
<th>Actual :Previous years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Assets</td>
<td></td>
</tr>
<tr>
<td>2. Current Assets</td>
<td></td>
</tr>
<tr>
<td>3. Total Liabilities</td>
<td></td>
</tr>
<tr>
<td>4. Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>5. Sales</td>
<td></td>
</tr>
<tr>
<td>6. Profit before Taxes</td>
<td></td>
</tr>
<tr>
<td>7. Profit after Taxes</td>
<td></td>
</tr>
</tbody>
</table>

(Name & Signature)

(Seal)
21. **Annexure IV**

The IPO wishes to utilize the capabilities of artificial intelligence in order to further streamline the processes in the IPO. At present, the IPO envisages the following fields in which AI may be utilized. The proposals may however include further areas where AI may be utilized.

(1) **Filing**
- Potential use of block chain to streamline our registration process and attempt to encourage information sharing by rights holders
- Assisting the user in filing

(2) **Electronic Data Processing**
- Digitization and automation of application filing procedures including scanning, OCR.
- Improved OCR proofreading
- Tagging information in drawings
- Increasing the speed of information retrieval

(3) **Classification**
- Pre-classification of patents, that is, before the application is classified by a user
- Patent classification
- Natural language processing to understand patent documents and to automatically classify them in the relevant specialization
- Software/machine learning capability to build sophisticated hierarchy of classification models to analyze the contents of each patent specification in unstructured PDF documents

(4) **Screening**
- Screening for atomic energy related subject matter
- Screening for defence related subject matter

(5) **Publication**
- Publication of Patent Office Journal

(6) **Allotment**
- Allotting patent applications to examiners on the basis of technology, workload of Examiner etc.
- Rectifying disparities in the system, such as, allowing processing on the basis of first to file rule as far as possible in practice keeping in view the different nodes functioning independently of each other.

(7) Prior art searching
- Pre-search including formulating search queries
- Human assisted prior art searches
- Prior art search capability based on semantics
- Deep machine learning for image searching
- Providing a single search interface for patent and non-patent literature

(8) Examination – formal and substantive
- Formality check: Conducting a check for all the possibilities, as far as possible, as per the Patents Act, 1970 and Patents Rules, 2003.
- Substantive examination: Determine patentability based on inputs retrieved through the use of AI
- Conducting human assisted classification

(9) Pre-grant Opposition(s), if any
- Evaluating the inputs received

(10) Hearings, if required
- Capability to automatically evaluate amendments

(11) Post grant Oppositions
- Evaluating the inputs received

(12) Others
- Interactive response system for stakeholders
- Engagement with stakeholders through social media outreach, etc.
- Automated user feedback
- Machine learning to answer IP policy and issues faced by policy makers
- Analysis of data to provide better services to the public
- Achieve self-innovation and self-learning to improve the system
• Assisting the authorities in relation to various user related aspects including quality control

• Use of Internet of Things (IoT) in the processes of IP Office

• Determination of sufficient evidentiary value to determine the rights of first filer in a First-to-File regime

• Machine translation capabilities for translating English into Indian regional languages and other languages into English as well as Indian regional languages.

• Based on parameters taken from the system, forecasting the timeline for the users in respect of different actions to be taken by the office.