

<p>FORM 1</p> <p>THE PATENTS ACT 1970</p> <p>(39 of 1970)</p> <p>&</p> <p>The Patents rules, 2003</p> <p>APPLICATION FOR GRANT OF PATENT</p> <p>[See section 7, 54 & 135 and rule 20 (1)]</p>	<p>(FOR OFFICE USE ONLY)</p> <p>Application No:</p> <p>Filing Date:</p> <p>Amount of Fee Paid:</p> <p>CBR No:</p> <p>Signature:</p>																				
<p>1. APPLICANT'S REFERENCE / IDENTIFICATION</p> <p>NO. (AS ALLOTTED BY OFFICE)</p>																					
<p>2. TYPE OF APPLICATION [Please tick (√) at the appropriate category]</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Ordinary (√)</td> <td colspan="2">Convention ()</td> <td colspan="2">PCT-NP ()</td> </tr> <tr> <td>Divisional ()</td> <td>Patent of Addition ()</td> <td>Divisional ()</td> <td>Patent of Addition ()</td> <td>Divisional ()</td> <td>Patent of Addition ()</td> </tr> </table>		Ordinary (√)		Convention ()		PCT-NP ()		Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()								
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<p>3. (3A) APPLICANT</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Name</th> <th style="width: 10%;">Nationality</th> <th style="width: 10%;">Country of Residence</th> <th style="width: 45%;">Address</th> </tr> </thead> <tbody> <tr> <td>1. Dr. Abhay Kumar Agarwal</td> <td style="text-align: center;">IN</td> <td style="text-align: center;">IN</td> <td>Department of Computer Science and Engineering, Kamla Nehru Institute of Technology, Sultanpur, U.P.</td> </tr> <tr> <td>2. Dr. Kanta Prasad Sharma</td> <td style="text-align: center;">IN</td> <td style="text-align: center;">IN</td> <td>Department of Computer Science and Engineering, GL Bajaj Group of Institutions, Mathura U.P.</td> </tr> <tr> <td>3. Dr. Chander Kant</td> <td style="text-align: center;">IN</td> <td style="text-align: center;">IN</td> <td>Department of Computer Science and Applications, Kurukshetra University Kurushetra, India.</td> </tr> <tr> <td>4. Alka Choudhary</td> <td style="text-align: center;">IN</td> <td style="text-align: center;">IN</td> <td>Department of Computer Engineering, J.C. Bose university of Science and Technology, Faridabad, India.</td> </tr> </tbody> </table>		Name	Nationality	Country of Residence	Address	1. Dr. Abhay Kumar Agarwal	IN	IN	Department of Computer Science and Engineering, Kamla Nehru Institute of Technology, Sultanpur, U.P.	2. Dr. Kanta Prasad Sharma	IN	IN	Department of Computer Science and Engineering, GL Bajaj Group of Institutions, Mathura U.P.	3. Dr. Chander Kant	IN	IN	Department of Computer Science and Applications, Kurukshetra University Kurushetra, India.	4. Alka Choudhary	IN	IN	Department of Computer Engineering, J.C. Bose university of Science and Technology, Faridabad, India.
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<p>3B. CATEGORY OF APPLICANT [Please tick (√) at the appropriate category]</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Natural Person (√)</td> <td colspan="3">Other than Natural Person</td> </tr> <tr> <td></td> <td>Small Entity ()</td> <td>Start up ()</td> <td>Others ()</td> </tr> </table>		Natural Person (√)	Other than Natural Person				Small Entity ()	Start up ()	Others ()												
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(12) PATENT APPLICATION PUBLICATION

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(54) Title of the invention : AN IOT BASED AUTONOMOUS FIREFIGHTING DRONE THROUGH MACHINE LEARNING

(51) International classification	:B64C0039020000, G08B0017120000, B64D0047080000, A62C0003020000, G05D0001000000	(71)Name of Applicant : 1)Dr. Abhay Kumar Agarwal Address of Applicant :Department of Computer Science and Engineering, Kamla Nehru Institute of Technology, Sultanpur, U.P. Uttar Pradesh India 2)Dr. Kanta Prasad Sharma 3)Dr. Chander Kant 4)Alka Choudhary
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Dr. Abhay Kumar Agarwal 2)Dr. Kanta Prasad Sharma 3)Dr. Chander Kant 4)Alka Choudhary
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(57) Abstract :

The present invention is related to an autonomous drone (100) for firefighting. The drone 5 (100) is capable of flying to a high altitude and extinguishing the fire present in the highrise buildings. The autonomous drone (100) comprises of the high-definition camera (104) and the thermal imaging camera (106) which are used for capturing the visuals in real-time. The thermal imaging camera (106) can enable the drone (100) to see through the wall of smoke and identify the exact location of the fire. The hydrant material stored 10 in the storage tank (108) is sprayed upon the location of the fire using the nozzle (110) which is a high-pressure nozzle (110). The drone (100) is capable of communication with the person flying the drone (100) through a microcontroller present in the control unit (114).

No. of Pages : 16 No. of Claims : 6