

We Claim:

1. A portable snake detection and warning device (100), said device (100) comprising:
a set of sensors (104) configured to sense in real time one or more signals from a pre-defined
5 proximity of the device (100);
a control unit (108) operatively coupled to the set of sensors (104), the control unit (108)
comprising one or more processors coupled to a memory, the memory storing instructions
executable by the processor to:
extract one or more parameters pertaining to frequency and intensity of the sensed one or more
10 signals, wherein the extracted one or more parameters are associated with the sensed one or
more signals; and
classify the sensed one or more signals by matching the extracted one or more parameters with
a pre-loaded dataset comprising a set of intensities and frequencies of one or more sound
signals associated with snakes; and
15 generate an alert signal based on positive matching of the extracted one or more parameters
and the pre-loaded dataset; wherein the generated alert signal is indicative of detection of the
snake in the pre-defined close proximity of the device (100); ~~and~~
~~2. The device as claimed in claim 1, wherein the device comprises~~ an alert unit (106)
operatively coupled with the control unit (108), ~~and wherein the alert unit configured~~ to
20 generate any or a combination of an audio and a visual alert based on the generated alert signal; ~~and~~
~~and~~
~~3. The device as claimed in claim 2, wherein the alert unit (106) comprises a vibration unit;~~
~~and wherein the vi~~ to generate a vibrating alert based on the generated alert signal.

25 ~~4.~~ 42. The device (100) as claimed in claim 1, wherein the set of sensors (104) comprises a
microphone coupled with a resonating device to enable sensing of the one or more signals in a
frequency range of 10 Hz to 1 KHz; ~~and~~
~~5. The device as claimed in claim 4, wherein the resonating device comprises vibrating plates~~
configured ~~such that~~ to enable sensing of frequencies less than ~~about~~ 80 hertz;
30 ~~6. The device as claimed in claim 4, the resonating device comprises vibrating plates~~
~~configured such that to reduce the bulkiness of microphone and reduce complexity of~~
~~processing~~ and classifying one or more parameters pertaining to frequency and intensity of the
sensed one or more signals.

AMENDED CLAIMS: MARKED UP COPY

~~7~~3. The device (100) as claimed in claim 1, wherein the device (100) comprises an illumination unit (102) to illuminate the area in close proximity of the device (100).

We Claim:

1. A portable snake detection and warning device (100), said device (100) comprising:
a set of sensors (104) configured to sense in real time one or more signals from a pre-defined
5 proximity of the device (100);
a control unit (108) operatively coupled to the set of sensors (104), the control unit (108)
comprising one or more processors coupled to a memory, the memory storing instructions
executable by the processor to:
extract one or more parameters pertaining to frequency and intensity of the sensed one or more
10 signals, wherein the extracted one or more parameters are associated with the sensed one or
more signals; and
classify the sensed one or more signals by matching the extracted one or more parameters with
a pre-loaded dataset comprising a set of intensities and frequencies of one or more sound
signals associated with snakes; and
15 generate an alert signal based on positive matching of the extracted one or more parameters
and the pre-loaded dataset; wherein the generated alert signal is indicative of detection of the
snake in the pre-defined close proximity of the device (100); and
an alert unit (106) operatively coupled with the control unit (108), to generate any or a
combination of an audio and a visual alert based on the generated alert signal, and, wherein the
20 alert unit (106) comprises a vibration unit to generate a vibrating alert based on the generated
alert signal.
2. The device (100) as claimed in claim 1, wherein the set of sensors (104) comprises a
microphone coupled with a resonating device to enable sensing of the one or more signals in a
frequency range of 10 Hz to 1 KHz, and wherein the resonating device comprises vibrating
25 plates configured to enable sensing of frequencies less than 80 hertz and classifying one or
more parameters pertaining to frequency and intensity of the sensed one or more signals.
3. The device (100) as claimed in claim 1, wherein the device (100) comprises an illumination
unit (102) to illuminate the area in close proximity of the device (100).

30 **FOR Chitkara Innovation Incubator Foundation**



Tarun Khurana
Regd. Patent Agent [IN/PA-1325]
Dated: 14th July, 2019

FORM 5
THE PATENT ACT, 1970
(39 OF 1970)
&
The Patents Rules, 2003
DECLARATION AS TO INVENTORSHIP
[See section 10(6) and rule 13(6)]

1. NAME OF APPLICANT (S)	Chitkara Innovation Incubator Foundation of address SCO: 160-161, Sector -9c, Madhya Marg, Chandigarh - 160009, India.
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hereby declare that the true and first inventor(s) of the invention disclosed in the complete specification filed in pursuance of my/our application numbered **201911028234** Dated **14th July, 2019** are

2. INVENTOR (S)

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Dated this: 14th day of July, 2019

Signature :-



Name: Tarun Khurana (IN/PA-1325)

Khurana & Khurana, Advocates and IP Attorneys

3. DECLARATION TO BE GIVEN WHEN THE APPLICATION IN INDIA IS FILED BY THE APPLICANT (S) IN THE CONVENTION COUNTRY:-

-NA-

To,

The Controller of Patent

The Patent Office, at Delhi

FORM - 26

THE PATENTS ACT, 1970
(39 of 1970)

&

THE PATENTS RULES, 2003
FORM FOR AUTHORISATION OF A PATENT AGENT/OR ANY PERSON
IN A MATTER OR PROCEEDING UNDER THE ACT
(See section 127 and 132; rule 135)



We, Chitkara Innovation Incubator Foundation having Nationality of India of address SCO:
160-161, Sector -9C, Madhya Marg, Chandigarh- 160009, India,

hereby authorize

Mr. Tarun Khurana, Regd. Patent Agent (INPA-1325);
Ms. Meenakshi, Regd. Patent Agent (INPA-1609)
Mr. Abhishek Pandurangi, Regd. Patent Agent (INPA-1722) and
Mr. Antony David, Regd. Patent Agent (INPA- 2066)
Mr. Tapan Shah, Regd. Patent Agent (INPA-2553)
Mr. Pradip Roy, Regd. Patent Agent (INPA-1468)
Ms. Mita Sheikh, Regd. Patent Agent (INPA-2194)

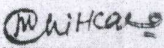
Khurana and Khurana, Advocates and IP Attorneys, E-13, UPSIDC, Site-IV, Behind-
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to act on my/our behalf and to appoint a substitute or substitutes as and when necessary in
connection with the filing, prosecution and grant of patent application(s) and request that all
notices, requisitions and communication relating there to may be sent to such person at the above
address unless otherwise specified.

I/We hereby revoke all previous authorization, if any made, in respect of same matter or
proceeding.

I/We hereby assent to the action already taken by the said person in the above matter.

Dated this 18th day of June, 2018

Signature.....


For Chitkara Innovation Incubator Foundation

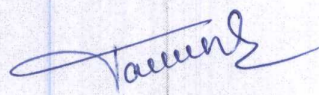
Name: Chitkara Innovation Incubator Foundation

Director

To
The Controller of Patents
The Patent Office, At Delhi

True Copy Attested


SHUBHARA SRIVASTAV
Advocate (Notary)
Distt Gautam Budh Nagar


TARUN KHURANA
(INPA-1325)
Present Application No- 201911028234
Original Application No- 201821020150



उत्तर प्रदेश UTTAR PRADESH

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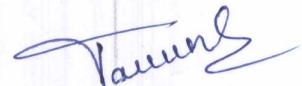
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THE PATENTS ACT, 1970
(39 of 1970)

FORM OF AUTHORISATION OF A PATENT AGENT OR ANY
PERSON IN A MATTER OR PROCEEDING UNDER THE ACT

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SHUBHRA SRIVASTAV
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TARUN KHURANA
(INPA-1325)

25/6/19

KHURANA & KHURANA
Advocates & IP Attorneys

SR no 37
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NAME & ADD OF PLAINTIFF
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02 SEP 2022