



US009410888B2

(12) **United States Patent**
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(10) **Patent No.:** **US 9,410,888 B2**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **METHODS, SYSTEMS AND DEVICES FOR DETECTING INSECTS AND OTHER PESTS**

33/025 (2013.01); *G01N 2021/845* (2013.01);
G01N 2021/8466 (2013.01)

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(58) **Field of Classification Search**
CPC ... *G01N 21/64*; *G01N 21/65*; *G01N 21/6486*; *G01N 33/02*
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 68 days.

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(21) Appl. No.: **14/236,009**

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(22) PCT Filed: **Jul. 12, 2012**

WO WO 2007/041755 A1 4/2007
WO WO 2010019515 A2 * 2/2010

(86) PCT No.: **PCT/GB2012/051836**

§ 371 (c)(1),
(2), (4) Date: **Jan. 29, 2014**

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(87) PCT Pub. No.: **WO2013/017860**

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PCT Pub. Date: **Feb. 7, 2013**

(65) **Prior Publication Data**

US 2014/0197335 A1 Jul. 17, 2014

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(30) **Foreign Application Priority Data**

Jul. 29, 2011 (GB) 1113138.0

(51) **Int. Cl.**

G01N 21/64 (2006.01)
G01N 21/65 (2006.01)
G01N 33/02 (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC . ***G01N 21/64*** (2013.01); ***G01J 3/44*** (2013.01);
G01N 21/6486 (2013.01); ***G01N 21/65***
(2013.01); ***G01N 33/02*** (2013.01); ***G01N***

(57) **ABSTRACT**

We describe a method for detection of the presence of an invertebrate or an invertebrate component in a sample of substantially non invertebrate material, comprising impinging said sample with a source of electromagnetic radiation at a wavelength of at least 600 nm and detecting Raman scattering/fluorescence of said invertebrate or a component of said invertebrate at a wavenumber where the non-invertebrate components of said sample either do not fluoresce or fluoresce with sufficiently low intensity wherein the non invertebrate material is edible and/or living.

20 Claims, 21 Drawing Sheets

