1. A patent must be "enabling"… what does this mean?

- the patent must enable a prima facie set of claims regarding the prior art disclosed in a provisional patent application
- the patent must describe one way the invention operates, but it does not have to describe the best mode of operation
- the patent must describe the invention well enough so that a person having ordinary skill in the art can make and use the invention without undue experimentation
- the patent must enable proof in compliance with Federal Rule of Civil Procedure 12(c)

2. The date this patent will expire is:

(12) **United States Patent**
Londesbrough et al.

(10) **Patent No.: US 10,519,175 B2**
(45) **Date of Patent: Dec. 31, 2019**

(54) **PREPARATION OF PSILOCYBIN, DIFFERENT POLYMORPHIC FORMS, INTERMEDIATES, FORMULATIONS AND THEIR USE**

(71) Applicant: **Compass Pathways Limited**, London (GB)

(72) Inventors: **Derek John Londesbrough**, Hartlepool (GB); **Christopher Brown**, Gateshead (GB); **Julian Scott Northen**, South Shields (GB); **Gillian Moore**, Sedgefield (GB); **Hemant Kashinath Patil**, Sittingbourne (GB); **David E. Nichols**, Chapel Hill, NC (US)

(73) Assignee: **COMPASS Pathways Limited**, London (GB)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/155,386**

(22) Filed: **Oct. 9, 2018**

(65) **Prior Publication Data**

US 2019/0119310 A1 Apr. 25, 2019

(30) **Foreign Application Priority Data**

Oct. 9, 2017 (GB) 1716505.1
Jun. 28, 2018 (GB) 1810588.2
Oct. 9, 2018 (GB) 1816438.4

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- Dec 31, 2039
- Apr 25, 2039
- Oct 9, 2033

3. A patent application has the following claim:

> **A plastic insert for the bottom of a shopping cart comprising circular receptacles to receive wine bottles and to maintain them in an upright and stable position so that they do not fall and break.**

A prior patent "A" discloses a plastic insert for the bottom of a shopping cart comprising rectangular receptacles to receive cereal boxes and to maintain them in an upright and stable position in order to keep them organized in the cart. Patent A also discloses that the receptacles could be circular to receive bottles or jars such as 2-liter soft drink bottles or mayonnaise jars.

Should the patent application be granted?

- Yes, because there is no suggestion in Patent A that the plastic insert can hold a wine bottle
- No, because Patent A suggests circular receptacles for any circular bottle, albeit for a different purpose.
- Yes, because Patent A is more interested in organizing boxes than holding bottles
- Yes, because the claim uses the insert to keep the bottles from falling and breaking while Patent A uses the insert to keep the cart organized

4. Which of the following is true?

- "comprising X, Y and Z" means that only X, Y and Z are present
- a dependent claim must broaden the scope of the claim it depends on
- each claim is a different set of boundaries being staked out for the invention
- each claim must be dependent on the previous claim

5. Which of the following is patentable subject matter?

- A claim to a new mineral discovered in the earth or a new plant found in the wild.
- A claim to a method of controlling a mechanical robot which relies upon storing data that represents various types of robot mechanical movements.
- A claim to a method of updating alarm limits by changing the number value of a variable to represent the result of the calculation.
- A claim to a method of using a computer to select a set of arbitrary measurement point values.
- A claim to a novel data structure.

6. Mike and Tom, who are not related, are shipwrecked on an undiscovered island. In order to signal for help, Mike invents a signaling device using bamboo shoots. Tom witnesses but does not assist in the development of the invention. The signaling device works and a helicopter comes and rescues Tom. However, Mike remains on the island due to overcrowding on the helicopter. Unfavorable weather conditions have prevented Mike's rescue to date. Tom would like to file an application for a patent for this device. Which of the following is true?

- Since Mike is unavailable, Tom may properly file an application for a patent in Mike's name on his behalf since he has witnessed the invention and knows how to make and use it.
- Tom can file an application in his name since he has witnessed the invention and knows how to make and use it. Since he is the first the patent the invention, Mike would no longer have any right to patent the invention.
- Tom can file an application in his name since he has witnessed the invention and knows how to make and use it. When Mike becomes available, the inventorship can be changed to Mike.
- Since Mike invented the invention, Tom cannot properly file an application for a patent – in his name or Mike's name – even though Mike is unavailable.

7. Which of the following can be patented?

- all answers listed here
- a new scientific theory
- a mathematical equation
- a mineral found in nature
- a method for treating illnesses

8. The inventors on a patent are those that:

- Made a meaningful contribution to the development of the invention
- Played a significant role in making the invention work effectively
- Contributed to the conception of the invention
- Played a role in the invention at the level of ordinary skill in the art

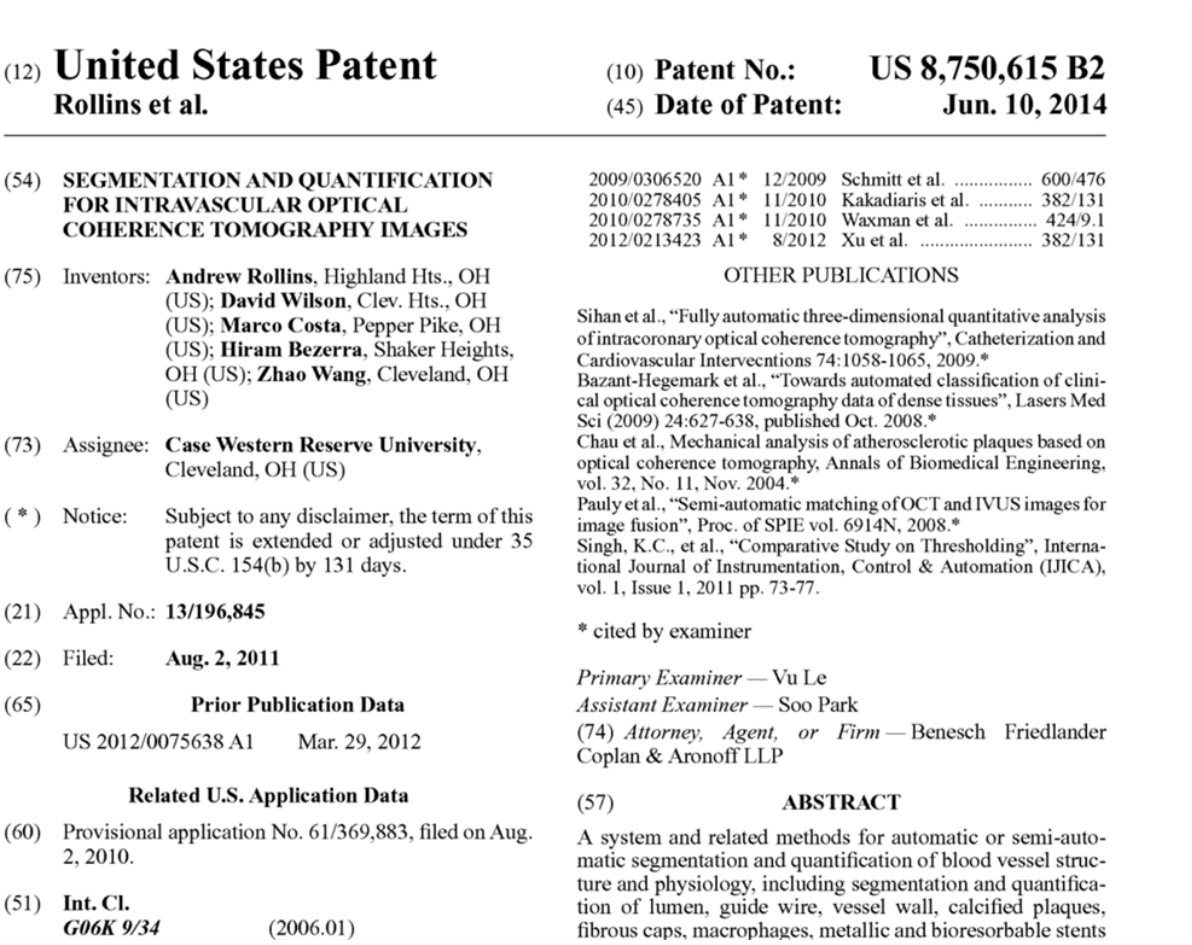
9. After a provisional patent application is submitted, to retain the benefit from this provisional patent the corresponding full patent application must be submitted:

- within one year for design patents and within six months for utility patents
- the earlier of one year or when a competing inventor files for a patent application for the same invention
- the later of one year or when a competing inventor files for a patent application for the same invention
- within one year

10. For a patent application to be rejected based on a determination of obviousness of the invention, the invention must be obvious to

- to a person having exceptional skill in the art to which the claimed invention pertains
- to a person having ordinary skill in the art to which the claimed invention pertains
- to a person having an ABET accredited degree in the art to which the claimed invention pertains
- to a person having licensure in the art to which the claimed invention pertains

11. Who owns this patent?



(12) **United States Patent**
Rollins et al.

(10) **Patent No.: US 8,750,615 B2**
(45) **Date of Patent: Jun. 10, 2014**

(54) **SEGMENTATION AND QUANTIFICATION FOR INTRAVASCULAR OPTICAL COHERENCE TOMOGRAPHY IMAGES**

(75) Inventors: **Andrew Rollins**, Highland Hts., OH (US); **David Wilson**, Clev. Hts., OH (US); **Marco Costa**, Pepper Pike, OH (US); **Hiram Bezerra**, Shaker Heights, OH (US); **Zhao Wang**, Cleveland, OH (US)

(73) Assignee: **Case Western Reserve University**, Cleveland, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 131 days.

(21) Appl. No.: **13/196,845**

(22) Filed: **Aug. 2, 2011**

(65) **Prior Publication Data**

US 2012/0075638 A1 Mar. 29, 2012

Related U.S. Application Data

(60) Provisional application No. 61/369,883, filed on Aug. 2, 2010.

(51) **Int. Cl.**
G06K 9/34 (2006.01)

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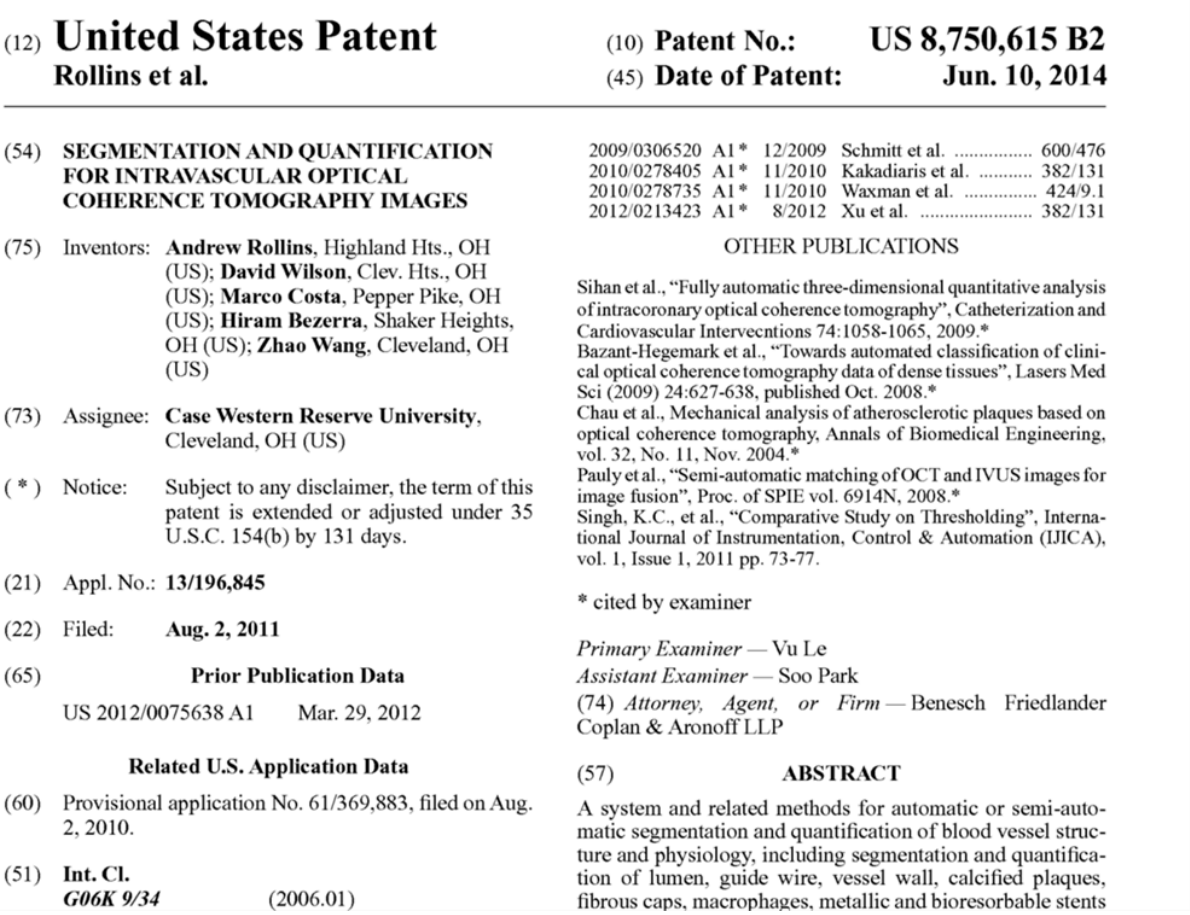
Primary Examiner — Vu Le
Assistant Examiner — Soo Park
(74) *Attorney, Agent, or Firm* — Benesch Friedlander Coplan & Aronoff LLP

(57) **ABSTRACT**

A system and related methods for automatic or semi-automatic segmentation and quantification of blood vessel structure and physiology, including segmentation and quantification of lumen, guide wire, vessel wall, calcified plaques, fibrous caps, macrophages, metallic and bioresorbable stents

- Benesch Freidlander Coplan & Aronoff
- Rollins, Wilson, Costa, Bezerra and Wang jointly
- joint ownership between Case Western Reserve University and Rollins, Wilson, Costa, Bezerra and Wang
- Andrew Rollins
- Case Western Reserve University
- joint ownership between Case Western Reserve University and Rollins

12. The effective filing date for this patent is:



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(73) Assignee: **Case Western Reserve University**, Cleveland, OH (US)

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Primary Examiner — Vu Le
Assistant Examiner — Soo Park
(74) *Attorney, Agent, or Firm* — Benesch Friedlander Coplan & Aronoff LLP

(57) **ABSTRACT**

A system and related methods for automatic or semi-automatic segmentation and quantification of blood vessel structure and physiology, including segmentation and quantification of lumen, guide wire, vessel wall, calcified plaques, fibrous caps, macrophages, metallic and bioresorbable stents

- Mar 29, 2012
- Mar 29, 2009
- Jun 10, 2014
- Aug 2, 2011
- Aug 2, 2010

13. The federal statute that describes which inventions can be patented is

- 27 CFR 1.51
- 35 CFR 102
- 35 USC 102
- 35 USC 101
- 35 CFR 103

14. The specification of a patent application contains three examples of applying antisense technology to regulating three particular genes in E. coli cells. However, claims in the application are broadly directed to the application of antisense technology to any cell. As background, it is known in the art that similar technologies are often unpredictable and require testing to see if the technology works in a particular type of cell. The patent application should be:

- rejected because the working examples in the application are narrow compared to the wide breadth of the claims and the unpredictability of the technology.
- granted because the inventor is not required to theorize or explain why others sometimes had failures with similar technologies.
- rejected because the examples do not meet the criteria of 35 USC 102 in light of the prior art
- granted because the claims are original, and therefore are self-supporting.

15. Which of the following would NOT disqualify a patent?

- A research report distributed in numerous copies but only internally within an organization to persons who understood the organization's policy of confidentiality regarding such reports.
- A doctoral thesis that was indexed, cataloged, and shelved in a single, university library
- A reference available only in electronic form on the Internet, which states when it was publicly posted.
- A paper that was orally presented at a meeting, where the meeting was open to all interested persons and the paper was distributed in written form to six people without restriction
- A technical manual that was shelved and cataloged in a public library, where there is no evidence that anyone ever actually looked at the manual

16. A patent gives the owner the right to:

- Make, use, sell, import, or license the invention
- Exclude others from making, using, selling, or importing the invention
- Make, use, sell, or import the invention
- Exclude others from selling or importing the invention, but others can make the invention for personal use

17. After a patent is issued, it can be revoked

- if a competitor shows the invention had been sold anytime before the date the patent is issued
- if a competitor shows the invention had been sold anytime before the effective submission date of the patent
- if a competitor shows the invention had been sold more than one year before the effective submission date of the patent
- A patent that is issued can never be revoked
- if a competitor shows the invention had been sold more than one year before the date the patent is issued

18. A continuation patent application can

- Neither change the bounds of the invention nor add new matter
- Change the bounds of the invention without adding new matter
- Add new matter without changing the bounds of the invention
- Change the bounds of the invention and add new matter

19. Inventor files an application for a metal alloy. The application contains the following Claim 1:

> **1. A metal alloy comprising at least 20% iron; at least 10% gallium, and at least 10% copper.**

Which of the following claims would be properly held indefinite under 35 USC 112(2)?

- Claim 2: The alloy of claim 1 containing 20% iron, 10% gallium, and 10% copper.
- Claim 2: The alloy of claim 1 containing at least 1% silver.
- Claim 2: The alloy of claim 1 containing at least 21% iron, 11% gallium, and 10.01% copper.
- Claim 2: The alloy of claim 1 containing 66% gallium and 14% copper.
- Claim 2: The alloy of claim 1 containing 54% copper and 27% gallium.

20. A patent application includes claims 9, 10 and 11:

9. A personal computer comprising a microprocessor and at least 1 gigabyte of RAM storage.

10. The personal computer of Claim 9, wherein the microprocessor has a clock speed of 100-200 MHz.

11. The personal computer of Claim 10, wherein the RAM storage is greater than ½ gigabyte.

Which of the following statements is in accord with the patent laws, rules and procedures under the fourth paragraph of 35 USC 112?

- Claims 9, 10 and 11 are proper
- Claims 9, 10 and 11 are improper
- Claim 9 is proper and Claims 10 and 11 are improper
- Claims 9 and 10 are proper and Claim 11 is improper
- Claim 9 is improper and Claims 10 and 11 are proper