

Patent Points

NOW STARTING MY 24RD YEAR...

Make Patents Great Again?

The conservative-populist wave of anger that brought Donald Trump to power has also reached the patent office. With signs saying "Make Patents Great Again", protestors and inventors burned patents in front of the USPTO in August, 2017. The protests are against the U.S. Patent Trial and Appeal Board (PTAB), an administrative tribunal created in 2011 to review the validity of patents.

The PTAB was created to combat patent trolls, but critics claim the board favors big business over small inventors. The cost to try a patent case at the PTAB is only about \$ 250,000, much less than the millions required for a full trial. But companies such as Apple and Google have been using the PTAB to invalidate patents rather than pay license fees for

patents held by small inventors. Since large tech companies such as Apple and Google are seen as anti-Trump, conservatives have turned against the PTAB, which is seen as supporting large anti-Trump tech companies.

The PTAB invalidates 80% of patents that finally go to trial, but this number is misleading, since half of the patents initially reviewed are upheld and never go to trial at the PTAB. Nonetheless, small inventors and their small businesses are having a difficult time finding financing since now their patents are more easily invalidated by large companies, so investors are less willing to speculate on these patents.

Ultimately, the US Supreme Court will decide if the PTAB continues, unless supporters can convince Donald Trump to act by executive order first.

INSIDE

- 2** Patent History Update
- 3** Bio-Sensing Chip Patent
- 4** 525 Patents Issued

Patent History Update

Modern patents have been traced back to the US Constitution and industrial-era England. Patents were thought to have originated in Venice somewhat before the year 1450. However, there is also evidence of a patent system in an Ancient Greek city in Italy almost 2,000 years before the Venetian patent system.

In 500 BCE, in Sybaris, an ancient Greek colony in Italy, "encouragement was held out to all who should discover any new refinement in luxury, the profits arising from which were secured to the inventor by patent for the space of a year." A third century writer named Athenaeus, cited an earlier source indicating that in Sybaris exclusive rights were granted for one year to creators of unique culinary dishes.

The Kings of England granted "patents" to individuals to grant them business charters and privileges. A letters patent was granted to a foreigner in 1331 to allow him to practice his trade in England. Another letters patent in 1552 was granted to produce a special glass, on the condition that others be instructed in this glass-making process.

The word "patent" means "left open", and referred to a document that had the King's official seal attached to the bottom of the document, allowing the document to be read without breaking the seal. Most documents were rolled up and the seal attached over the roll, requiring the seal to be broken before reading the document. Thus a patent was a document left open for reading by anyone.



Bio-Sensor Patent

My informal "Patent of the Year" is shown on the next page. A bio-sensing processor chip can be re-configured to detect various diseases or conditions, such as stroke or heart attack. Bio-sensor analog inputs connect to nano-wire receptors that bond with biological molecules, changing resistance. An ECG or other sensor can also be attached. The device can be a self-powered, wireless, and wearable.

Congratulations to the inventors from Hong Kong!



US009706269B2

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

(10) **Patent No.:** **US 9,706,269 B2**
(45) **Date of Patent:** **Jul. 11, 2017**

(54) **SELF-POWERED AND BATTERY-ASSISTED CMOS WIRELESS BIO-SENSING IC PLATFORM**

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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 101 days.

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H04Q 9/00 (2006.01)
H04W 4/00 (2009.01)

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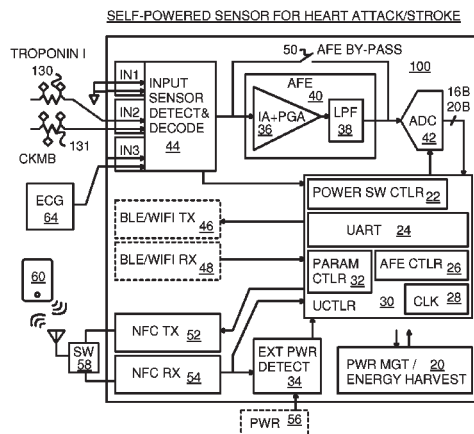
(52) **U.S. Cl.**
CPC **H04Q 9/00** (2013.01); **H03M 1/20** (2013.01); **H04B 5/0056** (2013.01);
(Continued)

(58) **Field of Classification Search**
None
See application file for complete search history.

(57) **ABSTRACT**

A bio-sensing processor chip acts as an auto-configurable platform to support a wide variety of bio-sensors. Nanowires with attached bio-receptors for specific bio-molecules, ECG, and SPO2 bio-sensors drive analog voltages or currents to analog inputs of the bio-sensing processor chip. These analog inputs are divided into three sections. An input sensor detector/decoder detects which analog inputs are active and configures an analog-to-digital converter (ADC) to convert first-section inputs to 12 digital bits, second-section inputs to 16 bits, and third-section inputs to 20 bits. An Analog Front-End (AFE) is bypassed for the first section inputs but amplifies and filters second and third section inputs. A Universal Asynchronous Receiver Transmitter (UART) sends the converted digital values to a nearby external device using NFC or WiFi transmitters. When no battery is detected, energy is harvested from NFC signals

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525 Patents Issued

After 23 years of writing patents as a full-time Patent Agent, 525 applications that I've written have now issued as patents. Congratulations inventors!

You can view the 525 issued patents I've written at:

www.gpatent.com

Rates Set for 2018

My hourly rate for 2018 will be \$270 per hour, billed in quarter-hour increments. Fixed-price quotes are available for patent applications to facilitate budgeting and avoid expensive surprises.

Prosecution work such as amendments and other paperwork is billed at the hourly rate. Litigation-support work is billed at a higher rate. Patent searches are billed at a flat \$500 for U.S. abstract searches. Patents can be viewed on-line.

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Address Correction Requested