

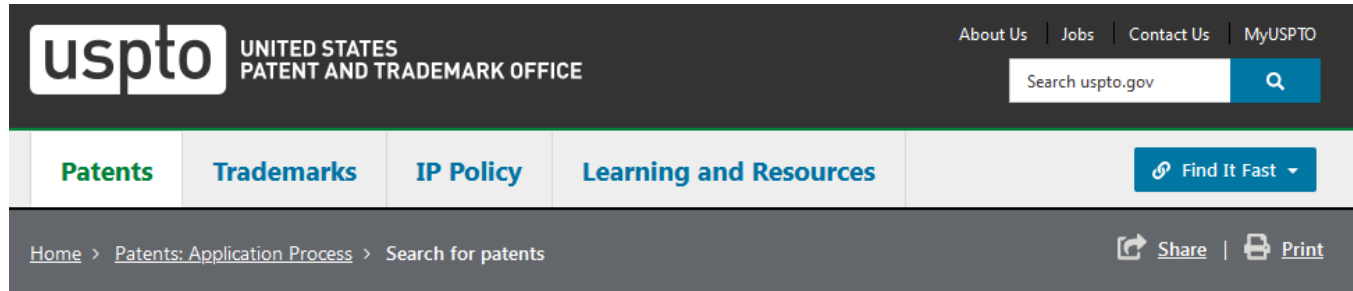
Patent Searching Tutorial

This document has been prepared by Michael E. McClurken, an advisor to a UNH-based startup company named Spairt. Though I mention Spairt occasionally, the general concept of how to search the patent database still applies to any startup.

First, click on this link to take you to the United States Patent & Trademark Office website:

<https://www.uspto.gov/patents-application-process/search-patents>

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- [The Seven Step Strategy](#) - Outlines a suggested procedure for patent searching
- A [detailed handout](#) of the Seven Step Strategy with examples and screen shots.

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When searching for specific numbers in the Patent Number field, utility patent numbers are entered as one to eight numbers in length, excluding commas (which are optional, as are leading zeroes).

Now, in the fields shown above, enter into the box to the right of "Term 1:" the words "lacrosse stick" (with no parentheses) and into the field for Item 2: "motion sensor"

You should get this screen, showing a list of 22 patent numbers and titles:

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Searching US Patent Collection...

Results of Search in US Patent Collection db for:
"lacrosse stick" AND "motion sensor": 22 patents.
Hits 1 through 22 out of 22

Jump To

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You’ve already identified Blast Motion as a competitor, with their bat motion sensor, but now you can see all the details that they’ve disclosed to the USPTO.



US009746354B2

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

(10) **Patent No.:** **US 9,746,354 B2**

(45) **Date of Patent:** **Aug. 29, 2017**

(54) **ELASTOMER ENCASED MOTION SENSOR PACKAGE**

(71) Applicant: **BLAST MOTION INC.**, Burlingame, CA (US)

(72) Inventors: **Joshua Martin**, San Diego, CA (US);
Bhaskar Bose, San Diego, CA (US);
Michael Bentley, San Diego, CA (US);
Ryan Kaps, Mesa, AZ (US)

(73) Assignee: **BLAST MOTION INC.**, Carlsbad, CA (US)

(*) 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.: **15/011,100**

(22) Filed: **Jan. 29, 2016**

(65) **Prior Publication Data**
US 2016/0146643 A1 May 26, 2016

Related U.S. Application Data

(63) Continuation-in-part of application No. 13/688,213, filed on Nov. 29, 2012, which is a
(Continued)

(51) **Int. Cl.**
A63B 69/36 (2006.01)
A63B 53/00 (2015.01)
(Continued)

(52) **U.S. Cl.**
CPC *G01D 11/245* (2013.01); *A63B 60/16* (2015.10); *A63C 11/00* (2013.01); *G01C 19/00* (2013.01);

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(Continued)

Primary Examiner — Lawrence Galka

(74) *Attorney, Agent, or Firm* — Arc IP Law, PC; Joseph J. Mayo

(57) **ABSTRACT**

A motion sensor package with an elastomer layer that encases the sensor electronics, including the sensors, a processor, an antenna, and a battery. The elastomer layer may provide shock isolation and water resistance to protect the enclosed electronics. Embodiments may also include an outer housing into which the elastomer encased package is installed. The outer housing may for example comprise two cylindrical sections that screw together to close the outer housing. In one or more embodiments part of the outer housing may be integrated into an item of sports equipment. Embodiments for golf may also include a golf club grip

What to look for and where. On page 2 of the PDF there's an abstract. This is usually the first thing you should look at to see if it's relevant to Spaitr.

Also on page 2, on the right, is a column of "references cited" which is all the U.S Patents that were referenced for this issued patent. Someday you can check out the most U.S. Patents cited (at the bottom, with the highest numbers.) You'll probably find most of your already-identified competitors in that list. There are 47 drawings for this patent, and some of them might be of interest to the hardware and software people on your team. But let's keep going.

On page 52 of 61 see the heading on the left – "BACKGROUND OF THE INVENTION." These few paragraphs often include a lot of valuable information on the state of the field. Here the inventors are laying the groundwork for their specific invention details which are disclosed further on.

(57) **ABSTRACT**

A motion sensor package with an elastomer layer that encases the sensor electronics, including the sensors, a processor, an antenna, and a battery. The elastomer layer may provide shock isolation and water resistance to protect the enclosed electronics. Embodiments may also include an outer housing into which the elastomer encased package is installed. The outer housing may for example comprise two cylindrical sections that screw together to close the outer housing. In one or more embodiments part of the outer housing may be integrated into an item of sports equipment. Embodiments for golf may also include a golf club grip adapter that is inserted into the top of a grip, and which attaches to the outer housing containing the elastomer enclosed sensor package.

On that same page is a heading “BRIEF SUMMARY OF THE INVENTION,” which gets specific but also may include valuable information on the field, explaining why they did what they did.

The next section to look at is “BRIEF DESCRIPTION OF THE DRAWINGS,” which is essential for whomever wants to look at the 46 drawings in any detail.

The next section “DETAILED DESCRIPTION OF THE INVENTION” may also include valuable information on how the elements shown in the drawings all work together.

DON'T PANIC!

Don't worry about whether you think that any part of the Spaitr concept infringes anything at this stage. Sure, all the stuff in this issued patent is “prior art” and Spaitr can never patent anything that is already disclosed in any part of this issued patent, but don't be tempted to start playing patent attorney.

If you have any qualms about this, check with your people at Pierce-Atwood. I think they will agree with my advice to not panic. You don't know enough yet, about either your own technology or anyone else's technology or products to panic at this early stage.

The last section is “What is claimed is:...” And you should absolutely not bother with this section for this or any other patent or patent application. You're simply not qualified to do that. Ignore the last section on claims.

Now go back to the USPTO site and click on “[USPTO Patent Application Full-Text and image database \(AppFT\)](#).” About a year after a patent is filed it is published by the USPTO, though most patents take 3-5 years to ultimately issue. You'll get a similar screen which will allow the same “Quick Search,” using two boxes to enter keywords.

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Summary Points:

- Try a wide variety of keywords when you experiment with filling in “quick search” boxes. It's hard to know what words to use, but you'll soon find out what works for you.
- Searching patents can quickly get out of hand. There's a famous country music song from 1989 by Robert Earl Keen, with the words of the chorus – “The road goes on forever, and the party never ends.” Don't let this “party” overwhelm you. Stop and take a break and do something else. It's just patent information to use as you see fit.