



THE INNOVATION CATALYST

STRATEGIC PARTNERSHIPS OFFICE NEWSLETTER AUGUST 2020

“INVENTOR” VS “INNOVATOR” — WHAT’S THE DIFFERENCE?

The first U.S. patent was granted in 1790, and since then, the U.S. Patent and Trademark Office has issued millions of patents to inventors from all across the world. Robert H. Goddard himself more than earned the title “inventor,” with his name on [214 patents](#).

The words “invention” and “inventor” have specific legal meaning, says Kerry Leonard, deputy chief for Goddard’s Strategic Partnerships Office (SPO). Though the word “innovator” applies broadly to any person who takes an innovative approach to technology development, it’s not a synonym for “inventor.”

“Here at NASA, we tend to use the two words interchangeably, but there is a legal reason why we use the term ‘inventor,’” Leonard says. “It’s especially important to know the difference when we’re talking about patents.”

The path to receiving a patent for your technology begins with submitting a New Technology Report (NTR), but there are certain requirements in order for you to earn the title of “inventor” of a patent. Here’s what you need to do to join the ranks of Robert H. Goddard:

DEFINING THE TERMS

The word “innovator” appears numerous times in the NASA Procedural Requirements (NPR), which describe how specific activities at NASA should be conducted. [NPR 7500.2](#) states that a new NASA-developed innovation includes “any invention, discovery, improvement, or innovation that was made in the performance of NASA work,” conceding that this definition is “very broad.”

A NASA innovator, according to the NPR, is “a NASA employee who conceives of or assists in the development of a new innovation.” Some might find this nebulous language frustrating, but it has a purpose, Leonard says.

“It’s good to have a generalized term that describes how we think and how we approach problems,” she says. “When you say the word ‘invention,’ people think of gears and lightbulbs, but innovation is a more fluid term that NASA uses intentionally to capture everything we do, not just the hardware itself.”

Under U.S. law, an inventor is a person who takes part in the conception of the invention that is defined in the claims of a patent application. Inventors need to make an inventive contribution to the technology described in the patent application, and this requirement is usually held to a higher standard than that of authorship. It is very important to recognize that being named as an author of a journal article or other publication does not mean that one will automatically be named as an inventor on a related patent application. In the end, it’s all about what is defined as “the claimed subject matter” in the patent application.

NAMING THE CLAIMS

Let’s say you submit an NTR. After an assessment from SPO and Goddard’s Office of Patent Counsel (OPC), the two offices decide to submit a patent application for your new technology. You will likely be asked to review the description and drawings (also referred to as the “specification” and “figures”) to ensure that the patent application is technically correct, but the OPC attorneys will draft your patent claims. These “claims” of the patent

application define the scope of the protection sought from the U.S. Patent and Trademark Office. In the eyes of the law, the claims are the most important part of the patent application as they define the exclusive rights granted in any issued patent. So while several researchers may contribute to the NTR and the description (also referred to as “the specification”) of a patent application, only those that made an inventive contribution to the invention described in the claims will be named as “inventors” on the patent.

“There are cases where the part of the technology you invented did not get claimed in the patent application,” Leonard explains. “Even though you innovated and contributed to the project, it does not make you an inventor of the patented technology. That’s a legal determination that our patent attorneys need to help define.”

Don’t get discouraged if your work isn’t named in the claims. Project members can make valuable contributions to technology development and still not end up on the patent application.

Even if you have a small role in a project, make sure to log detailed records of your contributions. Thorough and consistent documentation simplifies the patent application process.

KEEPING GOOD RECORDS

If you’re interested in getting the official inventor title, “document your work,” Leonard says. Patent attorneys use lab notebooks and other records when crafting the claims and other portions of the patent application. As you develop technologies across the course of many years, it’s extremely important to keep track of dates, progress, and each person who contributed.

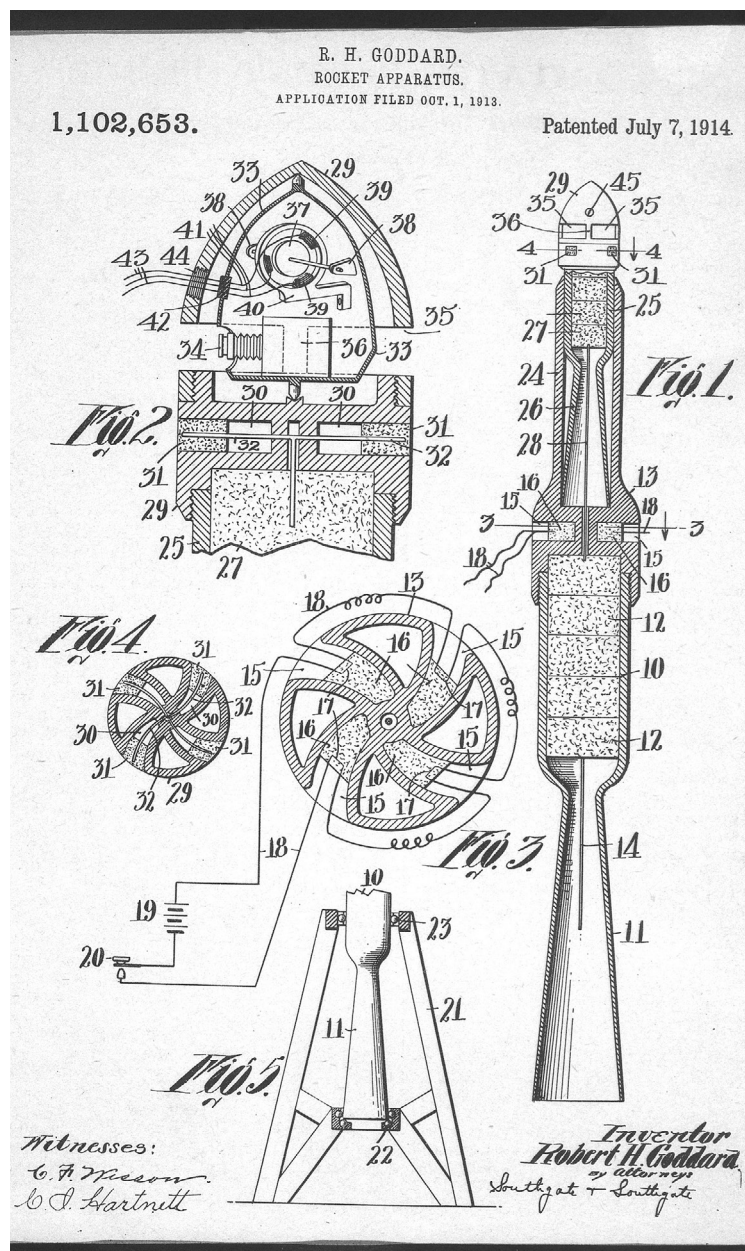
This style of documentation holds more weight and is more accurate than trying to recount details after the fact. Handwritten notebooks work fine, but electronic lab notebooks are good options, as well.

ROCKET APPARATUS — Robert H. Goddard has his name on 214 patents, one of the most famous being U.S. Patent 1,102,653, issued July 7, 1914, for his “rocket apparatus.”

Ultimately, Leonard says, she wants NASA innovators to know that their participation in the technology transfer process is invaluable, and it doesn’t end with submitting an NTR.

“You’re helping NASA and your own invention when you’re aware of what claims are being filed and what’s in the patent itself,” Leonard says. “As the inventor, you are in the best position to be an advocate for your technology.”

For more information, please join us for the next edition of “The Coffee Break,” which will focus on patents. The session takes place on Aug. 13 at 1:30 pm on Microsoft Teams. Please see “Upcoming Events” for additional details.



FIVE THINGS SPO WANTS YOU TO KNOW

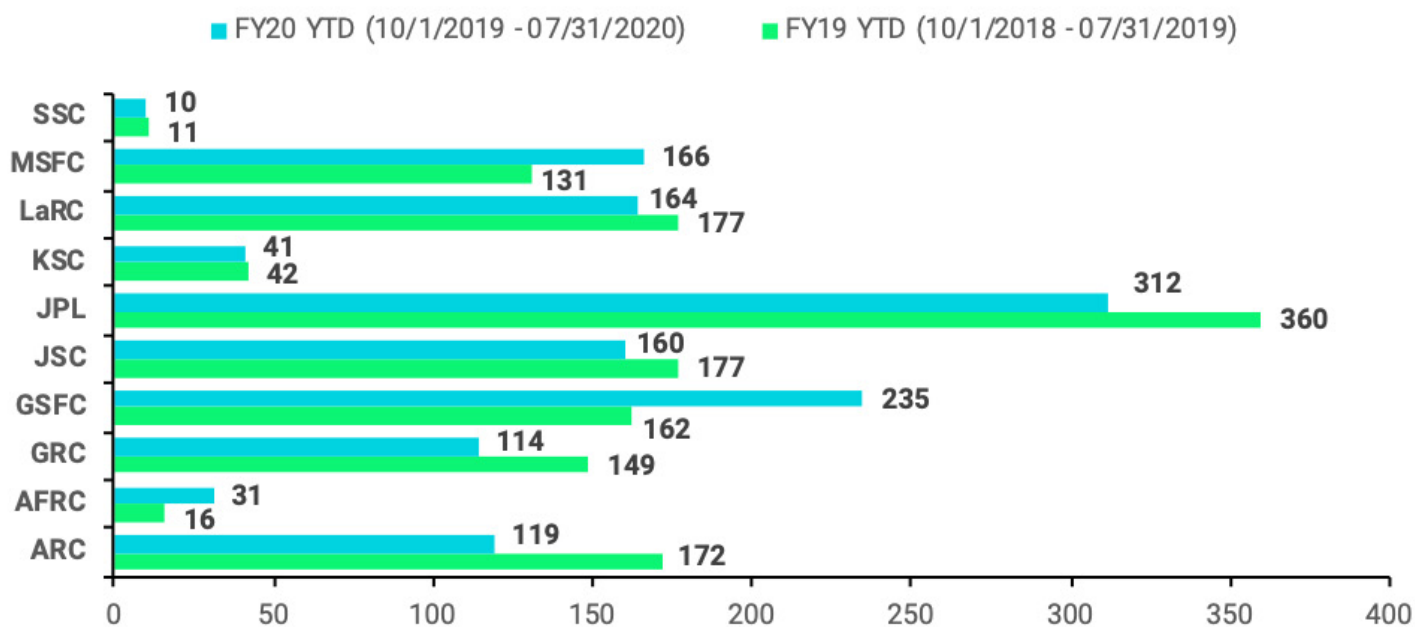
1

WE ARE IN **SECOND** PLACE!



As of July 31, Goddard has more New Technology Reports filed during FY2020 than any other NASA center, except JPL! With 235 NTRs filed and more than a month left in the fiscal year, Goddard innovators have already submitted 14.6 percent more NTRs in FY2020 than they did in FY2019. Additionally, Goddard has the highest number of NTRs reported with civil servants. Keep up the great work and continue reporting your new technologies!

TOTAL NTRS REPORTED



GODDARD NTR METRICS — Goddard is having an excellent year for NTR submissions, with 235 NTRs filed as of July 31, 2020.

2

SPO CAN **HELP** WITH YOUR NTRS.



We talk a lot about NTRs, but that's because they are essential parts of Goddard's technology transfer process. If you don't know how to fill out your NTR or can't fill it out because you don't have time, give SPO a call or send us an email. We can walk you through the steps or even fill out portions of the NTR for you after discussing your technology.

3

WE'RE HERE TO ANSWER **YOUR** QUESTIONS.

Technology transfer terminology might sound like its own language if you are new to the process. SPO has technology managers, commercialization engineers, and marketing professionals available to answer your questions and help guide you through any roadblocks you may be encountering. We want to make technology transfer as easy and painless as possible for you.



4

TECHNOLOGY TRANSFER CAN **BENEFIT** YOUR RESEARCH.



Licensed technologies are good for NASA, but they can be good for your work, too. Through licenses, Space Act Agreements, and the SBIR/STTR program, you can find collaborators and fellow technology developers whose goals align with NASA's. By participating in technology transfer, you can also become eligible for royalties and awards.

5

WE **APPRECIATE** EVERYTHING YOU DO!

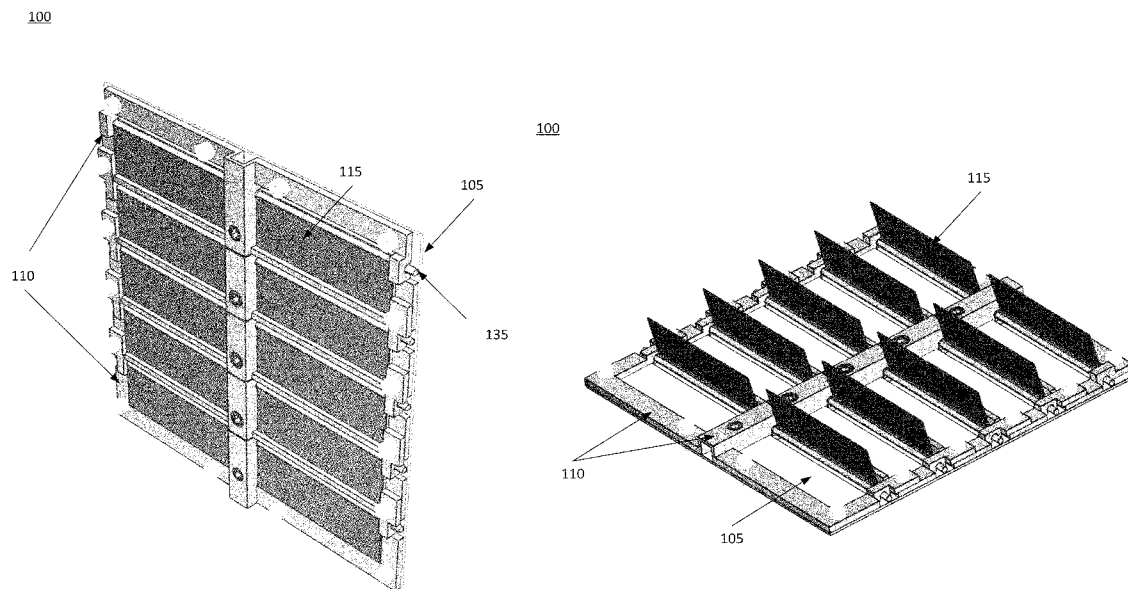
Especially during this stressful time, we want you to know that your work is important and impactful to Goddard. Your contribution matters, and Goddard wouldn't be a respected science center without you. Thank you for helping Goddard achieve its missions, both in space exploration and technology transfer.



Guess The Patent Drawing!

- 1 The technology was invented by Allison Evans.
- 2 This SmallSat technology uses passive thermal control to significantly improve the internal thermal stability of small spacecraft.
- 3 The technology was patented in 2018.

Can you guess the invention? [Click here](#) for the answer.



Tech Transfer Trivia

- 1 What year was Robert Goddard's "Rocket Apparatus" invention patented?
A. 1909 B. 1912 C. 1914 D. 1920
- 2 If your name is on the NTR, it will also be on the issued patent.
A. True B. False
- 3 Which of these is NOT important to include in a lab notebook?
A. Photos from your vacation B. Specific dates and times C. Names of contributors D. Timeline of developments

[Link To Answers](#)

Upcoming Events

THE COFFEE BREAK



GODDARD READS – A VIRTUAL EVENT SERIES IN PARTNERSHIPS WITH TOR BOOKS

Please join the Strategic Partnerships Office for a month-long event celebrating the convergence of science, reading, and writing. The series kicks off at 1:30 pm Tuesday, Aug. 25, with authors Mary Robinette Kowal and Martha Wells, who will appear on Microsoft Teams to talk about their books and experience writing in the science fiction and fantasy genres. Kowal, author of "The Lady Astronaut" series, and Wells, author of "The Murderbot Diaries" series, are both affiliated with Tor Books, which has a Space Act Agreement with Goddard to provide access to subject matter experts for authors interested in writing about science and space. Goddard's very own Kasha Patel will give a virtual presentation on her work as a science writer and science comedienne. In her talk, "Bringing Comedy to Science," Patel will share how humor can "make science more accessible" and improve communication between various audiences. She will speak at 1:30 pm Tuesday, Sept. 1.

Please check Dateline for the remaining lineup of events – we hope to see you online!

Recent SPO Activities

SMALL SATELLITE CONFERENCE 2020 – VIRTUALLY AMAZING

As this newsletter is being written, the 2020 Virtual SmallSat Conference is in full swing! See next month's issue for a recap of Goddard's participation, but in the meantime, you can check out the latest issue of [The Spark Magazine here](#), which features stories of Goddard's SmallSat activities, from rideshare to hardware reliability initiatives and more.



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Email Valeriya Nakshun (valeriya.a.nakshun@nasa.gov) to join our mailing list!