JOINT INVENTORSHIP AT THE MOVIES: STICK AROUND FOR THE CREDITS

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By Nathaniel Lucek and Cheryl Junker

Determining a list of inventors can be one of the messier parts of finalizing a patent application. Telling a colleague who put in late nights refining another's idea that he is not a joint inventor can lead to tension, bruised egos, or even open conflict. Telling a manager that he is not a joint inventor can be a career-limiting move.

The list of inventors on a patent application may not include all the members of a project team because not all work is sufficient to qualify one as a joint inventor under U.S. patent law. Unsurprising to many patent attorneys, the idea of who is a joint inventor on a U.S. patent application may differ between the engineers or scientists working on an invention and the U.S. Patent and Trademark Office. U.S. patent law dictates that project team members or article authors may not be the same as the list of joint inventors on a corresponding U.S. patent application.[1] This difference can be confusing to inventors, attorneys, and even judges.[2]

There is no bright-line standard for who qualifies as a joint inventor.[3] The general rule for joint inventorship is that each joint inventor must contribute in some significant manner to the formation of a definite and permanent idea for at least one claim of the invention.[4] Thus, each joint inventor must conceive of something in the claims.

While unclear, this requirement that only "real" inventors be listed on a patent application is important because a patent that lists incorrect inventors may be invalid.[5] While it is possible to correct a patent that lists incorrect inventors,[6] this process may be time consuming or costly. Without correction, an opponent can assert the patent is invalid during a patent infringement lawsuit.[7] Correction may affect ownership of the patent, which can complicate litigation or licensing.[8]

Rather than use facts from patent law cases, the purpose of this article is to provide examples illustrating joint inventorship from movies (which involves some spoilers). The analysis following each example assumes that modern U.S. patent law applies and that the "invention" would be patentable (i.e., we assume Doc Brown's flux capacitor can be patented). This article is not meant to cover every joint inventorship nuance of U.S. patent law. Rather, it is written merely to provide some examples of who really is an inventor.

Attorneys

Nathaniel Lucek

Practices & Industries

Intellectual Property & Technology

Alleged 'Inventor' Doesn't Conceive of Anything

Situations frequently come up in which a colleague (or manager) is involved with a project, but does not contribute to the invention. The alleged inventor may work on a different (and unclaimed) part of the invention, may just drink coffee during project meetings, or may only take notes on a whiteboard. Such activities do not make the colleague a joint inventor because a joint inventor must contribute to the conception of the invention.[9] This contribution need not involve every claim or be in equal parts compared to other inventors.[10] There is no lower limit on quantity or quality of contribution,[11] but some contribution to the conception of the invention is required.[12] Failure to contribute anything to conception means that a person is not a joint inventor.[13]

Specific examples from "Star Trek: The Voyage Home," "I Am Legend," "Real Genius," and "Tron" help illustrate this point.

Claim 1. A transparent aluminum matrix comprising…

In 1986's "Star Trek: The Voyage Home," Montgomery Scott attempted to build a tank to hold two humpback whales. He met with Dr. Marcus Nichols at a Plexiglas factory to trade information for the tank materials he needed. Scott entered a chemical formula for transparent aluminum on Nichols's computer. Nichols watched in amazement and remarked that it would take years to fully understand the matrix dynamics of the formula. Still, while Nichols was skeptical, he rushed to prevent Scott from clearing the formula from the screen. Dr. Leonard McCoy pointed out to Scott that the future may be altered by providing Nichols the formula. Scott retorted that, had Nichols not met them, Nichols may have become the original inventor of transparent aluminum anyway.

Because Nichols was amazed by the formula provided by Scott, it is unlikely that Nichols conceived of the formula for transparent aluminum before interacting with Scott. During the meeting, Scott provided all the information for this formula. Therefore, while unlikely anyone would believe that spacemen from the future were the original inventors, Nichols still did not conceive of the concept and is not an inventor because the formula was given to him by someone else.

Claim 2. A vaccine for treating a plague comprising…

Robert Neville was a doctor in apocalyptic New York City struggling to find a cure for a virus in 2007's "I Am Legend." Infected humans assaulted his house in the final scenes, breaching the defenses he carefully set up. During the assault, Neville realized that one of his vaccines was having an effect on a test subject. He quickly gave a sample to his acquaintance, Anna, and demanded that she escape to safety. Anna eventually reached a walled compound and handed the syringe with the sample to members of the community inside.

Neither Anna nor any medical personnel in the community can claim to be an inventor of the original vaccine, even though it's unlikely that Neville would dispute inventorship.

Claim 3. A solid argon matrix for a laser comprising…

The 1985 cult classic "Real Genius" featured an example of collaborative research between a primary investigator and a team of graduate and undergraduate students. The film's villain, Dr. Jerry Hathaway, headed the Crossbow Project, an effort by the Department of Defense to develop a powerful laser that could be shot from the air and hit a small, defined target. As

the film opens, the DOD research team informed Hathaway that they needed the laser to be delivered months ahead of schedule and with greatly increased power necessary to effectively eliminate a human target.

Hathaway's team consisted of the titular real geniuses tasked with modifying Hathaway's laser to increase its power. Through the hard work of these graduate and undergraduate geniuses, the students discovered that by synthesizing the argon matrix of the chemical laser in a solid, not gaseous, form, they could achieve the necessary power increase.

While Hathaway, being a total jerk, would surely dispute the contribution by the students, it is clear that their work qualifies them as inventors of the solid argon matrix. Hathaway may have conceived of the laser design but not the technology that enabled the power increase. Thus, the real geniuses, Mitch Taylor and Chris Knight, should be listed as inventors of this feature of the laser.

Claim 4. Digitizing a human into a computer file comprising…

Kevin Flynn, seeking to expose theft of his computer programs, was digitized by a laser in 1982's "Tron." The AI system in the program was created by Flynn's nemesis, Ed Dillinger. The AI system digitized Flynn to stop him from exposing the truth. Flynn fought his way through the various game programs to regain his human form and to find proof of Dillinger's theft. Even through Flynn discovered an incredible new world (well, incredible for the early 1980s) and a way of experiencing an alternate reality, he is not an inventor of the AI system that digitized him into the program.

Alleged 'Inventor' Only Follows Instructions of Another

Collaboration can involve executing another person's instructions. However, to be a joint inventor, the person executing the instructions must contribute to the conception of the invention. Merely designing hardware as dictated by another, assisting another, or following instructions of another does not make one a joint inventor[14] because following instructions or assisting an inventor without contributing to the invention does not involve an inventive act.[15]

"The Dark Knight" and "Independence Day" both have examples of a person following someone else's instructions.

Claim 5. A sonar-based cell phone monitoring system comprising…

Batman was fighting the Joker in 2008's "The Dark Knight." Batman, trying to gain leads on the whereabouts of the Joker, turned every cell phone in Gotham City into a microphone. To spy on millions of people, Batman applied researcher Lucius Fox's sonar concept to cell phones. Fox was uncomfortable with Batman's use of his sonar system to perform cell phone surveillance, calling it "unethical," "dangerous," and "wrong." Fox agreed to operate the system until the Joker was found but threatened to resign if the technology was not destroyed.

While Fox may have invented the original sonar system and operated it on behalf of Batman, it was not his idea to modify the system to spy on the city (and he likely would not have ever considered such an idea, based on his criticisms). Batman likely conceived of and built the system used to monitor the city. Fox merely assisted Batman during what may be a beta test of technology with large ethical issues and is not a joint inventor.

Claim 6. A method of uploading a file to an alien computer network comprising…

In 1996's "Independence Day," David Levinson suggested introducing the "Jolly Roger" computer virus to an orbiting alien mothership to defeat invading aliens before the aliens annihilated mankind. This required uploading the file through a direct connection to the alien mothership orbiting Earth. Steven Hiller volunteered to pilot a captured alien vessel with Levinson to introduce the computer virus to the alien mothership. While Hiller heroically piloted the alien ship and was vital to saving mankind, he cannot claim to be a co-inventor of the method of using the computer virus. He merely assisted Levinson in executing his idea.

Alleged 'Inventor' Only Conducts Experiments for Another

Inventors frequently enlist the help of others to conduct experiments to demonstrate feasibility or to test various parameters or modifications. An inventor does not need to know that an invention will work to have conceived of it.[16] Some later testing may be required to prove feasibility or to validate an inventor's hunch, which may involve help from others. One is not precluded from being a joint inventor because one's efforts were only experimental,[17] but merely conducting experiments at the direction of another does not necessarily make one a joint inventor.[18] The Federal Circuit recognized that this can be a difficult line to draw.[19] However, the qualitative contribution of a collaborator conducting experiments for an inventor must indicate that the collaborator contributed to the invention.[20] Otherwise, the collaborator who exercised ordinary skill in the art can be rewarded as an inventor either with or instead of the innovator who actually conceived of the invention.[21]

Characters in "Back to the Future" and "Ghostbusters" conducted experiments for an inventor.

Claim 7. A method of time travel using a flux capacitor comprising…

Marty McFly showed up to the Twin Pines Mall with a video camera in 1985's "Back to the Future," but he had no idea what was being planned by Doc Brown. After sending his dog, Einstein, a minute into the future in a time-travelling DeLorean, Brown explained that he conceived of the flux capacitor after hitting his head in the bathroom and that he spent 30 years researching the device. Libyan terrorists then arrived to kill Brown. McFly jumped into the DeLorean and frantically drove off trying to save his own life. However, upon hitting 88 mph during the chase, the DeLorean took McFly back to 1955. McFly may have proved that the DeLorean could transport a human back in time, but the idea for time travel using a flux capacitor was Brown's and McFly is not a joint inventor.

Claim 8. A method of destroying a giant Stay Puft Marshmallow Man comprising…

The 1984 classic "Ghostbusters" featured a whole host of impressive inventions developed by Drs. Egon Spengler and Ray Stantz. From the proton packs worn by the Ghostbusters to the ghost containment unit itself, a great deal of work and development went into the equipment used by the team.

Early in the movie, Spengler explained that crossing the streams from their proton packs "would be bad" (i.e., ending all life as we know it). However, when faced with a very angry Stay Puft Marshmallow Man and an unearthly portal that needed to be closed, Spengler proposed the idea of purposefully crossing the streams, which gave the Ghostbusters "a very slim chance" of survival.

The four Ghostbusters followed-through on Spengler's idea in spite of his earlier warnings. In doing so, they merely participated in his last-ditch experiment. Though all four became heroes, Spengler is the sole inventor of the idea that saved New York City.

Alleged 'Inventor' Only Reduces to Practice

Building a prototype or demonstrating that an invention works may be important to prove an invention's value to managers or potential investors. However, an inventor may lack the time or skills to build this prototype or demonstrate feasibility. An inventor is free to use the services, ideas, or aid of others to perfect an invention, which means that those other individuals may become joint inventors.[22] However, simply reducing an invention to practice does not necessarily make one a joint inventor.[23] Assisting the inventor after conception, such as by synthesizing a product, does not qualify one as a joint inventor unless additional contributions are made.[24]

"Ghostbusters II" and "Iron Man 2" both have situations where a character reduced another's idea to practice.

Claim 9. A method of cracking an evil-saturated shell comprising…

The Ghostbusters needed a symbol of positivity in 1989's "Ghostbusters II." Early in the movie, Drs. Egon Spengler and Ray Stantz discussed experimenting with "mood slime." Later, Spengler realized that the Ghostbusters needed to find a tremendous amount of positive energy to affect the slime and concluded that the group needed to find a symbol that all New Yorkers could get behind. All four Ghostbusters then looked up at the Statue of Liberty and began animating it to unite the city and defeat Vigo, the Scourge of Carpathia and Sorrow of Moldavia.

While all the Ghostbusters helped select the Statue of Liberty, Spengler was the first one to think of the idea of using a symbol to enhance the positive energy of New Yorkers. Thus, the idea of using a positive symbol to crack the evil-saturated shell around the museum is Spengler's and the others assisted him in selecting a symbol and reducing the idea to practice. Only Spengler can be considered an inventor of the use of a symbol to generate positive energy.

Claim 10. A new atomic structure comprising…

Tony Stark was slowly dying of palladium poisoning and trying to find a cure in 2010's "Iron Man 2," but permutations of every known element failed as an antidote. Stark eventually found evidence that his father discovered a new atomic element, but his father was unable to manufacture the element with the technology of his time. With the help of a homemade particle accelerator, Stark synthesized the new element that could cure him of palladium poisoning.

Stark admitted that he was merely "rediscovering" a new element. While Stark could potentially claim to be an inventor of a method of synthesizing the new element, his father is the inventor of the synthesized elemental structure. Stark merely reduced the atomic element to practice many years later and is not an inventor of the synthesized elemental structure.

Alleged 'Inventor' Only Provides General Knowledge

Complex research may entail seeking help from experts or others with specialized knowledge. While these folks may feel their contribution was critical to the success of the invention, providing background explanation does not necessarily make a person a joint inventor.[25] Consulting someone about an element or property can be considered equivalent to deriving the same information from a book.[26] By providing such background information, the collaborator provides prior art rather than a contribution toward a novel, non-obvious invention.[27] Thus, explaining concepts that are well-known or the current state of the art is insufficient to make one a joint inventor.[28] Collaborators must make a contribution to the claimed invention rather than merely provide background information that helps the inventors.[29]

"Short Circuit" illustrates this concept.

Claim 11. An adaptable and self-learning robot comprising…

The robot Number 5 became self-learning due to a lighting storm in 1986's "Short Circuit." Number 5 made its way to Stephanie Speck's house, where it sought "input" to increase its awareness. Speck provided Number 5 a dictionary and other forms of intellectual stimuli (of varying degrees of complexity).

Speck did not program or design Number 5, nor did she configure any of its systems to enable the malfunction that made it "alive." Speck may have provided information or suggested input to Number 5 to help develop its intellectual faculties or quirky personality, but she is not an inventor.

Alleged 'Inventor' Only Suggests Result or Desired End

Others can provide a spark of inspiration to an inventor. By itself, this spark probably does not make a person a joint inventor. Suggesting a result instead of a way to accomplish the result may not be enough of a contribution to be a joint inventor.[30] As phrased in one case, a person who "planted the seed" of an invention may not contribute sufficiently to be a joint inventor.[31] While there may not have been any invention without someone else posing a problem to be solved, posing that problem does not involve saying what the invention should be or how the invention should be performed.[32]

"The Dark Knight Rises," "Independence Day," and "The Prestige" all involve situations in which a character suggested a result or desired end.

Claim 12. An autopilot software program comprising…

Lucius Fox gave Bruce Wayne a tour of various defense projects that Fox was supervising in 2012's "The Dark Knight Rises." One, an urban fighter aircraft, nicknamed "The Bat," was given special mention. After Fox joked that the Bat came in black, Fox indicated that the aircraft worked fine except for the autopilot. Fox flattered Wayne that "it takes a better mind than mine to fix it" and suggested that Wayne was capable of completing the job.

Wayne uploaded a software patch to the Bat without Fox's realization or help. Even though Fox suggested that Wayne try to make the software patch for the autopilot and may have designed much of the Bat (perhaps even the non-functioning autopilot system), Fox is not a joint inventor on the software patch that fixed the autopilot. He merely posed a problem to be solved.

Claim 13. A method of shutting down an alien computer network comprising…

Aliens invaded Earth in 1996's "Independence Day." With humans facing all but certain defeat, David Levinson suggested introducing the "Jolly Roger" computer virus into the alien's computers to disable protective shields around the alien ships. Levinson's father provided the inspiration for this idea of uploading a computer virus by mentioning his concern that his son might "catch cold." While Levinson's father may have provided the inspiration that gave Levinson the idea to use the computer virus, he did not conceive of the idea of using cyberwarfare to defeat the aliens and is not a joint inventor. In fact, it seems doubtful that Levinson's father even understood the basics of cyberwarfare, in spite of Levinson referring to him as a "genius."

Claim 14. A duplication machine that can be used for personal amusement comprising…

Christopher Nolan's 2006 film "The Prestige" is a story of illusions, revenge, and Nikola Tesla. Robert Angier engaged with Albert Borden in a years-long battle over which illusionist was the more innovative performer. As Angier searched for a way to understand Borden's superior Transported Man trick, he became convinced that Borden made use of a device designed for him by the great Nikola Tesla. Angier believed this device could transport his body in order to make a surprise entrance in another part of the theater, duplicating the Transported Man trick.

Angier travelled to Tesla's laboratory in Colorado Springs and demanded that Tesla make him a duplicate of the device he believed that Tesla made for Borden. Despite Tesla's insistence that the machine Angier requested did not exist, the cash-strapped Tesla agreed to make Angier a machine. Through the magic of movies, Tesla developed for Angier a machine that created an exact duplicate of any object placed within its confines. This allowed Angier to recreate the Transported Man trick, but in an unexpectedly sinister manner.

Although Angier paid Tesla to make the machine and the technology Tesla develops is a new invention, Angier is not an inventor. Angier's directions to Tesla based on the device he thought Tesla could make for him were vague and merely suggested a desired result. Tesla experimented, researched, and conceived of the actual (Hollywood-concocted) machine.

Conclusion

When an inventor conceives of a concept that saves your life, the populace of New York City, or even the planet Earth, proper inventorship for a patent application is likely far from his mind. However, to prevent a future patent from being invalidated, it's important to list only the "real" joint inventors on a patent application. Rather than use 35 U.S.C. § 256 to correct inventorship, it's significantly easier to discuss who the joint inventors are and address claims of inventorship from your team's Marty McFly, Lucius Fox, or Jerry Hathaway early in the patent application filing process. There may be situations in which correcting inventorship later is too costly or difficult for a patent owner. In that case, your R&D team may need to focus on developing a flux capacitor to save your patent.

Nathaniel Lucek is a senior associate at Hodgson Russ. Cheryl Junker is a licensing manager at University of Georgia.

[1] *See* 35 U.S.C. § 116.

[2] *See* Ethicon, Inc. v. U.S. Surgical Corp., 937 F. Supp. 1015, 1037 (D. Connecticut 1996) (*stating* "[t]he boundaries of joint inventorship are unclear even to legal experts").

[3] Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997) (*quoted in* Vanderbilt Univ. v. ICOS Corp., 601 F.3d 1297, 1308 (Fed. Cir. 2010)).

[4] Bd. of Educ. v. Am. Bioscience, Inc., 333 F. 3d 1330, 1338-1339 (Fed. Cir. 2003); Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998); *Fina Oil & Chem. Co.*, 123 F.3d at 1473; Burroughs Wellcome v. Barr Labs., Inc., 40 F.3d 1223, 1227-1228 (Fed. Cir. 1994) (*stating* "[c]onception is the touchstone of inventorship").

[5] Trovan Ltd. v. Sokymat SA, Irori, 299 F.3d 1292, 1301 (Fed. Cir. 2002); Pannu v. Iolab Corp., 155 F.3d 1344, 1349 (Fed. Cir. 1998); *see also* Jamesbury Corp. v. U.S., 518 F.2d 1384, 1395 (Ct. Cl. 1975).

[6] 35 U.S.C. § 256; *Ethicon*, 135 F.3d at 1461 (*stating* "35 U.S.C. § 256 provides that a co-inventor omitted from an issued patent may be added to the patent by a court 'before which such matter is called in question'").

[7] *See* 35 U.S.C. § 282; *Pannu*, 155 F.3d at 1349-1350.

[8] *See Ethicon*, 135 F.3d at 1465.

[9] Israeli Bio-Engineering Project v. Amgen, Inc., 475 F.3d 1256, 1263-1264 (Fed. Cir. 2007); *Ethicon*, 135 F.3d at 1460; *see* Bard Peripheral Vascular, Inc. v. WL Gore & Assocs., Inc., 670 F.3d 1171, 1180 (Fed. Cir. 2012) (*finding* that failure to communicate "that the internodal distance was the key to creating successful grafts" meant the alleged inventor "did not contribute to the conception of the invention in a significant manner").

[10] *Ethicon*, 135 F.3d at 1460.

[11] *Fina Oil & Chem. Co.*, 123 F.3d at 1473; *but see Israeli Bio-Engineering Project*, 475 F.3d at 1263-1264 (*stating* the joint inventor must "make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention").

[12] *See Ethicon*, 135 F.3d at 1460 (*stating* "each needs to perform only a part of the task which produces the invention"); Pro-Mold Tool Co. v. Great Lakes Plastics, 75 F.3d 1568, 1575 (Fed. Cir. 1996) (*stating* "[t]o be a joint inventor, one must contribute to the conception of an invention"); Sewall v. Walters, 21 F.3d 411, 415 (Fed. Cir. 1994) (*stating* "[d]etermining 'inventorship' is nothing more than determining who conceived the subject matter at issue").

[13] *See* Stern v. Trustees of Columbia Univ., 434 F.3d 1375, 1378 (Fed. Cir. 2006) (*finding* "Stern did not have an understanding of the claimed invention, did not discover that prostaglandins have an effect on IOP, did not discover that repetitive application of prostaglandins to the eyes of primates can maintain reduced IOP, and did not conceive of the idea of the use of prostaglandins to reduce IOP in primates").

[14] *Sewall*, 21 F.3d at 416; *Ethicon*, 135 F.3d at 1460.

[15] *See Sewall*, 21 F.3d at 416.

[16] *Burroughs Wellcome Co.*, 40 F.3d at 1228.

[17] *Fina Oil & Chem. Co.*, 123 F.3d at 1473; *Burroughs Wellcome Co.*, 40 F.3d at 1229.

[18] *See Stern*, 434 F.3d at 1378 (*finding* "Stern simply carried out an experiment previously done by Bito on different animals — animals that Bito had already determined would be good models for prostaglandins research" and "Stern's contribution is insufficient to support a claim of co-inventorship").

[19] *See* Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1359 (Fed. Cir. 2004) (*stating* "[t]he line between actual contributions to conception and the remaining, more prosaic contributions to the inventive process that do not render the contributor a co-inventor is sometimes a difficult one to draw").

[20] *Burroughs Wellcome Co.*, 40 F.3d at 1229.

[21] Applegate v. Scherer, 332 F.2d 571, 573-574 (CCPA 1964); *see Stern*, 434 F.3d at 1378 (*finding* that Stern simply carried out an experiment and that "Stern did not have an understanding of the claimed invention . . . and did not conceive of the idea of the use of prostaglandins to reduce IOP in primates").

[22] *Fina Oil & Chem. Co.*, 123 F.3d at 1473 (*citing* Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 624 (Fed. Cir. 1985)).

[23] *Ethicon*, 135 F.3d at 1460.

[24] Hoop v. Hoop, 279 F.3d 1004, 1007 (Fed. Cir. 2002) (*quoting Ethicon*, 135 F.3d at 1460); Mattor v. Coolegem, 530 F.2d 1391, 1395 (CCPA 1976).

[25] *Eli Lilly & Co.*, 376 F.3d at 1359; Hess v. Advanced Cardiovascular Systems, Inc., 106 F.3d 976, 981 (Fed. Cir. 1997).

[26] O'Reilly v. Morse, 56 U.S. 62, 111 (1853) (*stating* "it can make no difference, in this respect, whether he derives his information from books, or from conversation with men skilled in the science" because "[i]f it were otherwise, no patent, in which a combination of different elements is used, could ever be obtained").

[27] *See* Nartron Corp. v. Schukra USA Inc., 558 F.3d 1352, 1357 (Fed. Cir. 2009); *Eli Lilly & Co.*, 376 F.3d at 1359 (*stating* "[a] contribution of information in the prior art cannot give rise to joint inventorship because it is not a contribution to conception").

[28] *Israeli Bio-Engineering Project*, 475 F.3d at 1263-1264; *Ethicon, Inc.*, 135 F.3d at 1460; *Fina Oil & Chem. Co.*, 123 F.3d at 1473; *see also Nartron Corp.*, 558 F.3d at 1359 (*finding* posing a problem or result for someone else to work out insufficient to make joint inventor); Caterpillar Inc. v. Sturman Indus., 387 F.3d 1358, 1377-1378 (Fed. Cir. 2004) (*finding* identifying appropriate materials for a particular device based on information in the public domain insufficient to make joint inventor); BJ Services Co. v. Halliburton Energy Services, Inc., 338 F.3d 1368, 1372-1374 (Fed. Cir. 2003) (*finding* no claim to joint inventorship when the alleged joint inventor "had no knowledge of the method, how the polymer would be used, or the C*

value"); *Hess*, 106 F.3d at 980-981 (*finding* suggesting an available material insufficient for joint inventorship).

[29] *See Nartron Corp.*, 558 F.3d at 1356-1357.

[30] Garrett Corp. v. U.S., 422 F.2d 874, 881 (Ct. Cl. 1970); *see also Nartron Corp.*, 558 F.3d at 1359; *Eli Lilly & Co.*, 376 F.3d at 1359.

[31] *Pro-Mold Tool Co.*, 75 F.3d at 1576.

[32] Morgan v. Hirsch, 728 F.2d 1449, 1452 (Fed. Cir. 1984).