

## Hyperstealth's Spooky4ce "Photon Avalanche" Quantum Mechanism

(Vancouver, B.C., February 23, 2021) Hyperstealth's "Spooky4ce" (pronounced Spooky Force) merges Applied Physics and Quantum Mechanics for breakthrough technologies with evidence that these are due in part to Photon Avalanches.

Albert Einstein described quantum entanglement as "spooky action at a distance", this is the ability of separated objects sharing a condition or state even over vast distances. See article: [Einstein's 'spooky action at a distance' spotted in objects almost big enough to see](#)



Hyperstealth has recently had four separate patent applications approved by the WIPO (World Intellectual Property Organization) 204 total claims approved (96%) and 14 separate inventions identified. See article: [WIPO identifies 14 Separate Hyperstealth Inventions](#)

All four applications have these "spooky action(s)" hence the term Spooky4ce;

- Invisibility (Broadband concealment across Near-UV, Visible, NIR Shortwave IR and Thermal) [Video Version-2](#); the first practical "Negative Refractive Index" material [Video-1](#), [Video-2](#)
- Solar Panel Amplifier which can triple power output, doubling the reflectivity of mirrors [Video](#)
- Laser Splitter which can split a laser into over 10 million lasers [Video](#)
- Display System which can produce holographic like videos across a gap of a few feet or more [Video](#)

Guy Cramer is the inventor and President/CEO of Hyperstealth, grandson and former research assistant to Donald Hings, P. Eng, M.B.E., C.M. (Member of British Empire and Order of Canada), inventor of the Walkie-Talkie and 56 other patents including the DEW Lime technology used by NORAD for over 30 years. See article [Hyperstealth Developing Exotic Anti-Radar Technology](#)

Cramer like his Grandfather has no university training, yet a broad understanding of the sciences. "For six years my Grandfather had me regularly go to the library to get university text books for me learn about physics, biology, chemistry, geophysics, astrophysics, cosmology, engineering... he stated if you want to learn something new you need some understanding of all the scientific fields, the universe does not operate independently in one area but combines all science to function as a whole."

Applied Physics and Quantum Mechanics seem at odds with each other in this cooperative aspect, this is what led to Einstein's "spooky action" dismissal of quantum entanglement.

Guy notes that his second application, the "Display System" was the first to get the WIPO approval with all 46 claims being approved on their first (Chapter 1) review. "This is almost unheard of for an application this size, they usually deny some claims, these can be appealed in a Chapter 2 response as happened with the other three applications but 100% on the first filing is very rare. This really shows how unique this application was." See [Video](#)

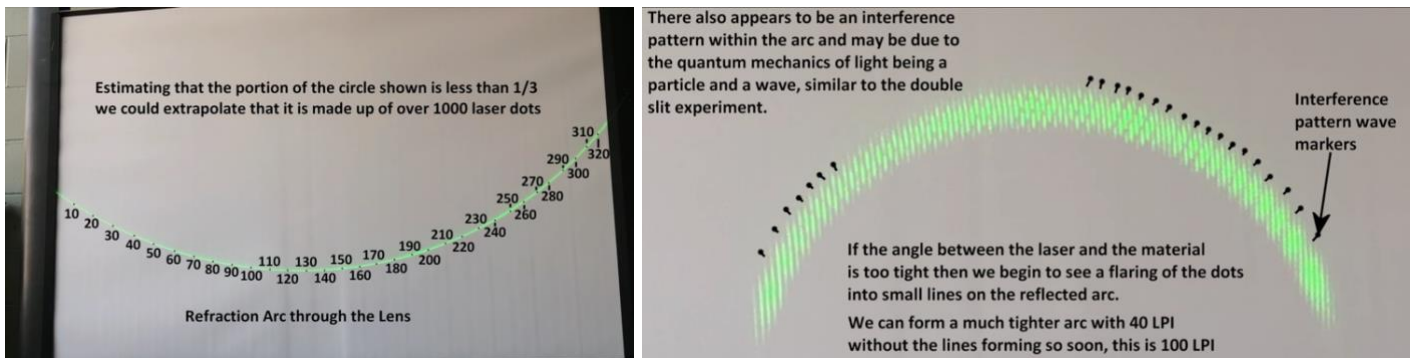
The examiner found a number of patents that utilized two lenticular lenses in opposing polarization to each other but not with a gap of a few feet from each other to cause an image or video projected through

the first nearly transparent lens to scramble the light in one polarity, traverse the gap and reassemble back in order on the second lens which is in the opposite polarity. Cramer states, "It's similar to the Star Trek transporter, but we are doing it with photons of light and not matter. It works very well, but it didn't make sense why!"

In his recorded demonstrations of the Display System, Cramer claims that the video recordings look washed out compared to it live in-person. This is due to the video camera compensating for too much light coming through the lenses. See [Video](#). "At my SOFWERX demonstration of this technology in February 2020 in Tampa, a SOCOM representative said he could not tell the difference between me and the video like hologram next to me and he was only sitting 10 feet away."

"I also did a different demonstration for SOFWERX using a miniature 13 lumens projector that fit in the palm of my hand, this is an extremely weak output. The video result on the second lens was well beyond expectations and showed how small of a projector could be used in the field. This means less power required, less weight and longer use."

Another clue for Guy came when he was experimenting with the lenticular lens and a laser, he was trying to determine what was happening to the light when he discovered an interference pattern associated with quantum mechanics, specifically the particle/wave function of light in the double slit experiment. His theory that quantum mechanics was causing this has since been confirmed as "100% accurate", by a physics expert. These experiments eventually led to the laser splitting patent application which was just approved for all 40 claims by WIPO, just over a month ago. Images below are from this [Video](#)



The initial breakthrough for Cramer occurred in 2010 when he discovered that a lenticular lens could redirect light to a viewer to make a target behind nearly invisible, this is not a patentable technology as lenticular lenses have been around since the late 1920's. This single lens is effective but only if the background is plain or you have background items flowing in the horizontal direction. "We did get claims approval for curving a single lens to conceal an object and using a single lens in a cylinder shape to hide an object from 360 degrees, as well as using a single lens for shadow reduction and/or shadow removal of the target".

Cramer began to experiment with two lenses back to back which led to most of the patent application. When the two back to back lenses were in parallel, he could see right through it, by offsetting the two lens sheets, which is just a few millimeters caused an area to form in the middle of the lenses to effectively hide an object, make it invisible to a viewer on the other side. This was the first practical "Negative Refractive Index Material". See article: [The Discovery of a Material with a Negative Refractive Index leads to Invisibility](#).

Initially Guy developed a way to reduce or remove shadows to resolve a problem with an MIT developed 3D Solar Tower technology potentially capable of Terawatt-Scale Solar Power Generation, see [video](#). Guy realized during those experiments that the lenticular lenses could also reflect light onto a solar panel to increase the output. After years of experimentation and refinement, he achieved a tripling of power output on thin film solar panels and nearly triple on Monocrystalline and Polycrystalline, which are the three main types of solar panels. See [Video](#).

Cramer admits that these discoveries didn't really have an explanation but he says, "When you file a patent application you don't need to know that, if you can demonstrate a cause and effect, the 'why it works' can remain unknown."

So apart from the spooky actions, and quantum ripples (interference pattern) in his laser experiments, is there anything that might better describe these odd outcomes? A quantum physics behavior known as "Photon Avalanching" seems to describe a number of these attributes.

*"Avalanching is an extreme example of a nonlinear process, in which a change in input or excitation leads to a disproportionate—often disproportionately large—change in output signal. Large volumes of material are usually required for the efficient generation of nonlinear optical signals..."* said James Schuck, associate professor of mechanical engineering

The article at Phys Org from January 13, 2021 continues: *Of particular note to researchers is that the absorption of just a single photon leads not only to a large number of emitted photons but also to a surprising property: the emitted photons are "upconverted," each one higher in energy (bluer in color) than the single absorbed photon.* See article [Engineers observe avalanches in nanoparticles for the first time](#)

Guy points out, "This 'photon avalanche' describes the overwhelming of the light sensors of the recording camera in our Display System videos, the disproportionately large number of lasers that can be split from a single laser and doubling the reflectivity over mirrors to triple solar panel output. Even the negative refractive index in our back to back lenticular lenses may owe this attribute to photon avalanching when the material is offset as the left and right side images of the background on the lens merge in the middle to form a neutral zone or dead spot to hide a target, the photon avalanche seems to be directed towards that zone from both sides and the photons pile and merge together."

In a more recent application Guy has split a single laser into 10,000,000 lasers (below left) and nearly 20,000,000 beams in the image on the right. The laser used is blue in color but the purple coloration as it splits also hints at the upconverted higher energy level described in the article, this color shift is more noticeable in-person. These images below are from this [Video](#)

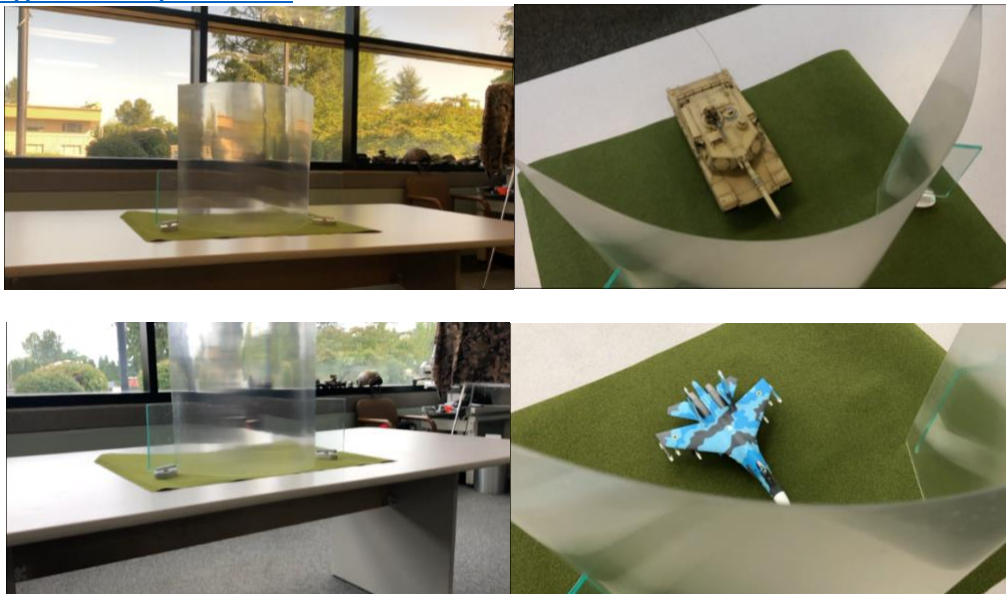


Cramer continues, “The initial dismissal of these discoveries, prior to any patent application publication was due to my highly improbable if not impossible claims of broadband invisibility, many scientists claimed it had to be a hoax. The second series of dismissals came after the patent applications were published and I released the video demonstrations, some claimed that I was manipulating the videos until a national Canadian TV news program demonstrated it live on TV”. See [Real-life invisibility cloak created by B.C.-based company](#). “Many said my branding of the material as Quantum Stealth was to hype the technology but it likely had nothing to do with quantum mechanics. Others were downplaying the significance of the inventions due to the fact that I wasn’t using new nanomaterials, but a simple lenticular lens that had been around for almost 100 years, there was skepticism that I would get any claims approved, most of this came from people who never took the time to watch the demonstration videos past the first few minutes and thought I was simply trying to patent a single lens. Had they watched further they would have seen Versions-2 to 13 which all use multiple lenses in new configurations and are considered new inventions.”

“Now that we achieved 96% of the patent application claims approvals, our critics have all but disappeared (no pun intended). The question is no longer, does it work, but why does it work and the “photon avalanche” seems to be the best explanation given the multiple evidence of quantum interference patterns, increased light in the display system and solar amplifier applications as well as the upconverting color shifting to higher energies when lasers are used.”

Cramer adds, “I think Einstein would have enjoyed seeing our larger scale demonstration evidence for this “spooky action at a distance” and the resulting practical applications in many different fields, it may have persuaded him to fully accept entanglement.”

Version-2 shown below is the first practical “negative refractive index” material. It is capable of bending light around ground assets. Video: <https://vimeo.com/356760336>



Hyperstealth has provided over 100 minutes of videos demonstrations and explanations for these four patent applications, these can be seen on each of these Hyperstealth sites: New sites <https://invisibility.ca>. and <https://www.hyperstealth.net>. Our old website <https://www.hyperstealth.com/> cannot be modernized without formatting problems which removes images and pages that are required to establish original copyright publication dates for our numerous camouflage patterns.

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