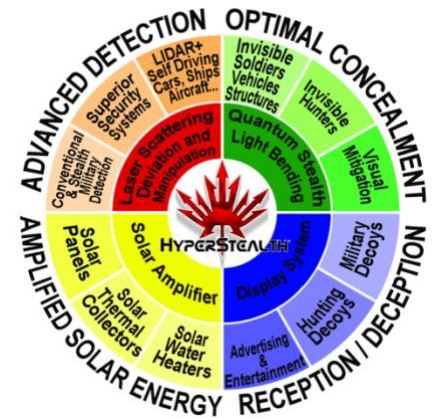


WIPO identifies 14 Separate Hyperstealth Inventions

(Vancouver, B.C., February 1, 2021) Hyperstealth's four patent applications results in 14 separate inventions and 204 total claims approved (96%) by the WIPO (World Intellectual Property Office).

In the international phase of a PCT (Patent Cooperation Treaty) filing, the examining agency will identify separate inventions within the application, often they will allow the group of inventions to remain within the one application. Once those claims have been approved by the WIPO then the national phase begins by filing within separate PCT countries of which there are currently 153.



This chart is not representative of the 14 inventions. It is to demonstrate the diversity of the four patent applications

Very few companies and/or inventors would file in all 153 countries due to the high costs they would incur. The decided countries for the national phase will eventually require the PCT application to be split into the separate inventions as determined by the WIPO examiner. As the claims are already approved, this is usually just a formality for many of the PCT countries as they will automatically approve of the separate inventions as per the WIPO ruling. Some countries, may decide to re-examine the application independently once it gets to the national phase.

In Hyperstealth's four patent applications; Light bending material (invisibility), solar panel amplifier which can triple the power output, a laser splitter which can split a single laser into millions of lasers and a new display system which can create holographic like videos, the WIPO has determined there are 14 separate inventions and each one will have to be a separate patent application in each country we have filed in.

Many of Hyperstealth's expected products will have crossover patent pending numbers (eventually patent numbers) associated with one product.

Some Hyperstealth products may cover three of the four separate applications, such as one or more of the concealment inventions of the light bending (Improved camouflage) application and masking the thermal signature of the concealed object (a separate invention within that same application), coupled with the shadow reduction/elimination invention within the Solar Amplifier application, coupled with the holographic like video imaging from our Display System application.

This provides not only a way to conceal an asset and its shadow but also provide a video of something different than the target onto the material to deceive the viewer or sensors to the actual hidden asset.

See these video demonstrations as they all relate in some application to the description above:

<https://vimeo.com/356985920> Hyperstealth Display System Deceptec™ Combined Mobile Concealment and Deception

<https://vimeo.com/359612995> Hyperstealth Light bending material: Version-1 Riot Shield

<https://vimeo.com/355142119> Hyperstealth Quantum Stealth™ Version-1 Thermal Signatures

<https://vimeo.com/355141095> Hyperstealth Broadband Invisibility Cloak: Quantum Stealth operates not only in the visible spectrum but also the Near and Medium Ultraviolet, Near Infrared (NIR), Shortwave Infrared (SWIR), and Thermal Spectrums

<https://vimeo.com/355142607> Hyperstealth Version-1 Abrams Tank Mobile Concealment and Shadow reduction
<https://vimeo.com/355143458> Hyperstealth Display System: Ghostech™ Military Holograms
<https://vimeo.com/361442518> Hyperstealth Declipse™ Shadow Reduction Technology Solves MIT Roadblock towards Terawatt-Scale Solar Power Generation

This integration also strengthens the ability to defend our inventions against infringement as the court's would have to consider multiple inventions and multiple claims that make up those inventions and even if just one claim was found to be infringing it would likely lead to a successful defense.

Unless permitted by the patent owner, one commits patent infringement by making and/or using and/or offering to sell and/or selling something that contains every element of a patented claim or its equivalent while the patent is in effect.

For infringement to occur, the prohibited act must be done in the country in which the patent is filed in or a violating product must be imported into the country in which the patent is filed after being created abroad.

I modified the above statement from https://www.law.cornell.edu/wex/patent_infringement to represent filing in multiple countries rather than just the United States and clarified that just making and/or using an invention without permission is in violation. Also exporting without permission from a country that has that patent filed to a country without the patent filed is also a violation.

While the national phase will take time to split the 4 initial applications into the 14 separate inventions and the award of a patent number for each could still take months or even years, once a patent number is issued, infringement can be defended in that country retroactively to the priority date of filing the application even if that filing was done in another country.

Any additions made between the initial provisional patent application and the follow on non-provisional patent application would be enforceable only by the non-provisional filing date, in our case, these non-provisional applications would be our international filing dates .

SYSTEM AND METHOD OF AMPLIFYING SOLAR PANEL OUTPUT WO2019119108

All 45 claims (100%) approved by WIPO, April 2020

3 inventions

Now in National phase - filed in 44 countries

International Filing Date: December 21, 2018

Priority date: U.S. Provisional Application: December 22, 2017

<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2019119108>

The claims are directed towards a plurality of inventions as follows:

#1) claims 1-28, 34-44 are directed towards a reflective sheet that has a diffraction grating. The sheet reflects additional area of light onto a solar panel.

#2) claims 29-31, 45 are directed a cylindrical reflector.

#3) claims 32, 33 are directed towards a refractive sheet that will end up diffusing light, onto a solar panel.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY			International application No. PCT/CA2018/000242
Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims 1-45		YES
	Claims None		NO
Inventive step (IS)	Claims 1-45		YES
	Claims None		NO
Industrial applicability (IA)	Claims 1-45		YES
	Claims None		NO

DISPLAY SYSTEM

WO2019161478

All 46 claims approved (100%) by WIPO, August 2019

3 inventions

Now in National phase - filed in 44 countries

International Filing Date: February 13, 2019

Priority date: U.S. Provisional Application: February 20, 2018

<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2019161478>

The claims are directed to a plurality of inventive concepts as follows:

Group I

Claims 1-25 and 34-39 are directed to a display system and method, wherein the system comprises a first lens sheet having a first polarity; a second lens sheet having a second polarity proximate the first lens sheet; wherein the first polarity is opposite the second polarity and, upon a first projector (or first and second projectors) projecting a first image (or first and second images) through the first lens sheet onto the second lens sheet, the first image (or first and second images) is/are visible on the second lens sheet but not on the first lens sheet.

Group II

Claims 26-33 are directed to a display system comprising a first lens sheet having a first polarity for receiving an image from a first projector; a plurality of secondary lens sheets each having a second polarity arranged adjacent one another to form at least partially enclosed space, proximate the first lens sheet; wherein the first polarity is opposite the second polarity, the first projector projects images onto an inner surface of at least one of the second lens sheets through the first lens sheet, and an observer looking at outer surfaces of any two different ones of the secondary lens sheets from outside the enclosed space, observes different views of a virtual decoy image that appears formed within the enclosed space.

Group III

Claims 40-46 are directed to a passive display system comprising a matte having an image thereon; a double sided lens sheet having a first polarity, proximate the matte; wherein at a first location relative to the double sided lens sheet a first view of the image is visible to an observer; and at a second location relative to the double sided lens sheet a second observed view is visible to the observer but not the first view, wherein said second location different from the first location and said first view is different from said second view.

Reference is made to the following documents:

D1: US 2003/0025995 A1 (REDEBERT et al.) 06 February 2003 (06-02-2003)
 D2: US 4,078,854 (YANO) 14 March 1978 (14-03-1978)

The technical features which are common to the three groups of claims are a first lens sheet having a first polarity, a second lens sheet having a second polarity proximate the first lens sheet, wherein the first polarity is opposite the second polarity. However, these technical features are known from the prior art (see reference documents D1: figure 3 and paragraph [0039]; and D2: figure 5 and corresponding text). Therefore, the groups of claims do not share any inventive subject-matter which could form the basis for a single general inventive concept.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No. PCT/CA2019/000019
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
1. Statement		
Novelty (N)	Claims 1-46	YES
	Claims NONE	NO
Inventive step (IS)	Claims 1-46	YES
	Claims NONE	NO
Industrial applicability (IA)	Claims 1-46	YES
	Claims NONE	NO

INTERCONNECTED LENS MATERIALS ARRANGED AS LENS SHEETS FOR IMPROVED CAMOUFLAGE WO2020006621

73 claims approved by WIPO (89%), December 2020

5 inventions

Now in National phase - filed in 59 countries

International Filing Date: June 26, 2019

Priority date: U.S. Provisional Application: July 4, 2018

<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2020006621>

Reference is made to the following documents:

D3 WO 2014/175540 A1 (AN) 30 August 2014 (30-08-2014),

The claims, as amended, are directed to a plurality of inventive concepts as follows:

Group A: Claims 1-56 and 63-67 are directed to a double-sided lens sheets comprising a first side comprising a first set of elongate lenses and a second side comprising a second set of elongate lenses, where the lenses are made of a substantially light-transmitting material.

Group B: Claims 57-62 and 76-77 are directed to single-sided lens sheet assemblies and methods of manufacturing, the sheets having a first lens sheet with a first side comprising a first set of elongate lenses at a first density and a second, flat side, and a second lens sheet with a third side comprising a second set of elongate lenses at a second density and a fourth, flat side, where the lenses are made of a substantially light-transmitting material.

Group C: Claims 68-71 are directed to a method of shadow reduction comprising placing one or more lens sheets between a light source and the target, wherein the light passing through the sheet is refracted in numerous directions within the plane of the lenses thereby removing or reducing the visibility of shadow from the target.

Group D: Claims 72-75 are directed to a method of masking thermal signature from a target, from reaching a thermal detector, the method comprising placing a lenticular material between the viewer and the target, the lenticular material comprising at least one of: glass, plexiglass, plastic or acrylic, so that the thermal signature is prevented from being detected by the detector.

Group E: Claims 78-82 are directed to a method of manufacturing a lens sheet assembly comprising providing a plurality of hollow tubes adjacent one another, each of said tubes shaped like an elongate lens and filling said plurality of hollow tubes with fluid.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY		International application No. PCT/CA2019/000098
Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement	
1. Statement		
Novelty (N)	Claims 1-38 and 40-82	YES
	Claims 39	NO
Inventive step (IS)	Claims 1-38, 45-62, and 66-82	YES
	Claims 39-44 and 63-65	NO
Industrial applicability (IA)	Claims 1-82	YES
	Claims None	NO

Note: Claim 39 was the only claim which was not considered Novel and also not Inventive. This caused claims 40-44 and 63-65 to also be considered not to have an inventive step as they were all dependent on claim 39. As this Chapter II decision came out less than a month prior to our deadline to the national phase, we didn't have time to appeal, however, when we file within the separate countries for the National phase, we can then modify claim 39 to potentially satisfy the examiners opinion, if approved, this could then trigger the other claims to be accepted as having inventive steps.

SYSTEM AND METHODS FOR LASER SCATTERING, DEVIATION AND MANIPULATION
WO2020056484

All 40 claims approved (100%) by WIPO, January 2021 (still awaiting WIPO site update, documents below are from their International Preliminary Report on Patentability Chapter II sent to our Patent Attorney)

3 inventions

National phase to begin in March, 2021

International Filing Date June 26, 2019

Priority date: U.S. Provisional Application September 17, 2018

<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2020056484>

The claims are directed to a plurality of inventive concepts as follows:

Group A: Claims 1-14, 35, and 36 are directed to a system for diverting a laser beam comprising a single sided lenticular sheet with a plurality of longitudinal lenticular lenses and a smooth opposite side and a laser beam aimed at the lens side of the sheet such that a first portion of the laser rays are diverted by refraction to form a beam of a first shape and a second portion of the laser rays is reflected to form a beam of a second shape.

Group B: Claims 15-24 are directed to systems for manipulating two laser beams to form a cone comprising a double sided lenticular sheet with longitudinal lenticular lenses on both sides of the sheet, where first laser is directed at the first side of the sheet so that the rays form a first curved plane, the second laser is directed at the second side of the sheet so that the rays form a second curved plane.

Group C: Claims 25-34 and 37-40 are directed to a system for diverting a laser beam and a method of making said system for diverting a laser beam comprising two single sided lenticular lens sheets, each comprising a plurality of parallel longitudinal lenses on one side and a smooth opposite side, where the first and second sheets are positioned so that the smooth sides face each other to form a double sided sheet.

Group A, B, and C share the elements of lenticular sheets having parallel longitudinal lenses and lasers, both of which are considered common general knowledge. The use of a single sided sheet to divert a laser in Group A is distinct from Group B, which uses double sided sheets to redirect multiple lasers to form and project a specific shape with the lasers. Group C is distinct from Groups A and B because it is directed toward the construction of double sided, lenticular sheets by adhering two single sided sheets together.

The claims must be limited to one inventive concept as set out in PCT Rule 13.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CA2019/000097

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims 1-40		YES
	Claims None		NO
Inventive step (IS)	Claims 1-40		YES
	Claims None		NO
Industrial applicability (IA)	Claims 1-40		YES
	Claims None		NO

Version-2 shown below is the first practical “negative refractive index” material. It is capable of bending light around ground assets. The shadow of the target may still be visible behind the material but it is removed from the viewer when the material is in-between the target and viewer. 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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