# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI829578

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|---|---|
| **SUBMISSION TYPE:** | NEW ASSIGNMENT |
| **NATURE OF CONVEYANCE:** | ASSIGNMENT |

**CONVEYING PARTY DATA**

| Name | Execution Date |
|---|---|
| Halio, Inc. | 06/28/2024 |

**RECEIVING PARTY DATA**

| | |
|---|---|
| **Company Name:** | Halio, LLC |
| **Street Address:** | 3955 Trust Way |
| **City:** | Hayward |
| **State/Country:** | CALIFORNIA |
| **Postal Code:** | 94545 |

**PROPERTY NUMBERS Total: 38**

| Property Type | Number |
|---|---|
| **Application Number:** | 18499756 |
| **Application Number:** | 17543553 |
| **Application Number:** | 17846726 |
| **Patent Number:** | 9036242 |
| **Patent Number:** | 9823536 |
| **Patent Number:** | 10437128 |
| **Patent Number:** | 11579508 |
| **Patent Number:** | 11829044 |
| **Patent Number:** | 9606410 |
| **Patent Number:** | 10627692 |
| **Patent Number:** | 11520205 |
| **Patent Number:** | 9091895 |
| **Patent Number:** | 9606411 |
| **Patent Number:** | 10871695 |
| **Patent Number:** | 11860499 |
| **Patent Number:** | 9507233 |
| **Patent Number:** | 10372006 |
| **Patent Number:** | 10838280 |
| **Patent Number:** | 11874579 |
| **Patent Number:** | 11194213 |

| Property Type | Number |
|---|---|
| **Patent Number:** | 10210368 |
| **Patent Number:** | 10579842 |
| **Patent Number:** | 10997383 |
| **Patent Number:** | 10591798 |
| **Patent Number:** | 11537022 |
| **Patent Number:** | 10372007 |
| **Patent Number:** | 10768503 |
| **Patent Number:** | 10705403 |
| **Patent Number:** | 10386688 |
| **Patent Number:** | 11675242 |
| **Patent Number:** | 10591796 |
| **Patent Number:** | 10877347 |
| **Patent Number:** | 11340510 |
| **Patent Number:** | 10901284 |
| **Patent Number:** | 11650471 |
| **Patent Number:** | 10768501 |
| **Patent Number:** | 11187955 |
| **Patent Number:** | 11732526 |

**CORRESPONDENCE DATA**

**Fax Number:** 5713275452

***Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.***

**Phone:** 5713275450
**Email:** ipntlaw@ipntlaw.com
**Correspondent Name:** Keon Woo PARK
**Address Line 1:** 102 Maple Ave. E
**Address Line 4:** Vienna, VIRGINIA 22180

| | |
|---|---|
| **ATTORNEY DOCKET NUMBER:** | FPA/2024067 |
| **NAME OF SUBMITTER:** | Hyeokjae Choi |
| **SIGNATURE:** | /Hyeokjae Choi/ |
| **DATE SIGNED:** | 03/05/2025 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

**Total Attachments: 9**
source=Halio Patent Assignment - Fully Executed Copy#page1.tiff
source=Halio Patent Assignment - Fully Executed Copy#page2.tiff
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# PATENT ASSIGNMENT AGREEMENT

**WHEREAS**, by unanimous written consent of the the board of directors of Halio, Inc., a Delaware corporation ("***Halio***" or the "**Company**"), and with the consent of the shareholders of the Company, on June 28th 2024, Halio, in accordance with the assignment for benefit of creditors laws of the State of California, transferred ownership of all of its right, title and interest in and to all of its assets to Halio (assignment for the benefit of creditors), LLC, a California limited liability company (the "***Assignee***"), and in so doing has also designated Assignee to act as the assignee for the benefit of creditors of Halio (the "***General Assignment***");

**WHEREAS**, pursuant to the terms of the General Assignment Agreement between Halio and the Assignee, all of the Company's rights title and interest in its assets have been assigned to the Assignee, including the Company's patents and patent applications;

**WHEREAS**, Halio and Assignee desire to memorialize the transfer of the Company's patents and patent applications and related rights to Assignee.

**NOW, THEREFORE, BE IT KNOWN**, pursuant to the General Assignment Agreement, Halio has conveyed, assigned, transferred, delivered and set over for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and does hereby convey, assign, transfer, deliver and set over, unto said Assignee, its successors and assigns, (1) the entire worldwide right, title and interest in and to each and all Letters Patents in the United States and in all foreign countries including, without limitation corresponding Patent Cooperation Treaty patent applications and corresponding National patent applications and all inventions, improvements and discoveries disclosed in said Letters Patents and applications which were held by the Company immediately prior to the consummation of the General Assignment, including those set forth in **Schedule A** hereto, and in and to all substitutions, divisions, continuations, continuations-in-part, reexaminations, extensions, renewals and reissues (as applicable) thereof, including without limitation of generality, all rights of priority resulting from the filing of patent applications relating to any of the foregoing as well as any and all choses in action and any and all claims and demands, both at law and in equity, that Assignor has or june have for damages or profits accrued or to accrue on account of the infringement of any of said Letter Patents, patent applications, inventions, improvements and discoveries (or any provisional rights therein), the same to be held and enjoyed by Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by the Company if the assignment set forth in this Patent Assignment had not been made; (2) the full and complete right to file patent applications in the name of the Company or its designee, at the Assignee's, or its designe's election, on the aforesaid inventions, improvements, discoveries and applications in all countries of the world; and (3) the entire right, title and interest in and to any Letter Patent which june issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same.

AND the Company hereby authorizes and requests the United States Patent and Trademarks Office to issue said Letter Patents in accordance with this Agreement.

[Signature page follows]

IN WITNESS WHEREOF, Halio has caused this Patent Assignment to be signed by its duly authorized officer as of June 28th, 2024.

Halio, Inc.

By: _____
Name: Howard Bergh
Title: CEO

Halio (assignment for the benefit of creditors), LLC, in its sole and limited capacity as the assignee for the benefit of creditors of Halio, Inc.

By: _____
Name: Michael A. Maidy
Title: Manager

## ACKNOWLEDGMENT

**A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.**

State of CALIFORNIA

County of ALAMEDA

On JUNE 28, 2024 before me R. GRADY, Notary Public, personally appeared

HOWARD BERGH

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

R. GRADY
COMM. NO. 2419667
NOTARY PUBLIC - CALIFORNIA
ALAMEDA COUNTY
MY COMM. EXPIRES OCT 7, 2026

R. Grady
Notary Public

*Commission Number: 2419667*
*Commission Expiration: October 07, 2026*

*Document Name (optional):* _____

**CALIFORNIA ACKNOWLEDGMENT** CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Santa Clara }

On July 2 2024 before me, Carissa Kozacek,
*Date* *Here Insert Name and Title of the Officer*

personally appeared Michael Mendy,
*Name(s) of Signer(s)*

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____
*Signature of Notary Public*

CARISSA ANNE KOZACEK
Notary Public - California
Santa Clara County
Commission # 2462152
My Comm. Expires Sep 4, 2027

*Place Notary Seal and/or Stamp Above*

**OPTIONAL**

*Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.*

**Description of Attached Document**

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

**Capacity(ies) Claimed by Signer(s)**

| | |
|---|---|
| Signer's Name: _____ | Signer's Name: _____ |
| ☐ Corporate Officer – Title(s): _____ | ☐ Corporate Officer – Title(s): _____ |
| ☐ Partner – ☐ Limited ☐ General | ☐ Partner – ☐ Limited ☐ General |
| ☐ Individual ☐ Attorney in Fact | ☐ Individual ☐ Attorney in Fact |
| ☐ Trustee ☐ Guardian or Conservator | ☐ Trustee ☐ Guardian or Conservator |
| ☐ Other: _____ | ☐ Other: _____ |
| Signer is Representing: _____ | Signer is Representing: _____ |

## Schedule A

### Halio, Inc. - Patent Portfolio Report

| LS Ref. | Type | Status | Country ID | Title | App. No. | Filing Date | Pub. No. | Pub. Date | Patent No. | Issue Date |
|---|---|---|---|---|---|---|---|---|---|---|
| 33252-0010 L0010-DP | DES | ISSUED | US | DRIVER DEVICE | 29/681,883 | 2/28/2019 | | | D906,303 | 12/29/2020 |
| 33252-0011 L0011-DP | DES | ISSUED | US | GATEWAY DEVICE | 29/681,885 | 2/28/2019 | | | D906,304 | 12/29/2020 |
| 33252-0015 L0015 | UTL | ISSUED | US | EXPERT SYSTEM FOR PREDICTION OF CHANGES TO LOCAL ENVIRONMENT | 13/798,050 | 3/12/2013 | US 2014-0067733 A1 | 3/6/2014 | 9,406,028 | 8/2/2016 |
| 33252-0016 L0015C | UTL | ISSUED | US | EXPERT SYSTEM FOR PREDICTION OF CHANGES TO LOCAL ENVIRONMENT | 15/225,047 | 8/1/2016 | US 2016-0334123 A1 | 11/17/2016 | 10,579,024 | 3/3/2020 |
| 33252-0017 L0015C2 | UTL | ISSUED | US | EXPERT SYSTEM FOR CONTROLLING LOCAL ENVIRONMENT BASED ON RADIANCE MAP OF SKY | 16/804,370 | 2/28/2020 | US 2020-0272111 A1 | 8/27/2020 | 11,740,593 | 8/29/2023 |
| 33252-0022 L0005TRK1 | UTL | ISSUED | US | CLOUD-BASED SYSTEM FOR CONTROLLING ELECTROCHROMIC DEVICES | 16/786,703 | 2/10/2020 | US 2020-0257179 A1 | 8/13/2020 | 10,921,675 | 2/16/2021 |
| 33252-0023 L0006TRK1 | UTL | ISSUED | US | CLOUD-BASED COMPONENT LINKING IN A SMART WINDOW SYSTEM | 16/786,719 | 2/10/2020 | US 2020-0258470 A1 | 8/13/2020 | 11,056,074 | 7/6/2021 |
| 33252-0024 L0003 | UTL | ISSUED | US | DISTRIBUTED ENERGY MANAGEMENT SYSTEM | 16/775,070 | 1/28/2020 | US 2020-0241375 A1 | 7/30/2020 | 11,106,104 | 8/31/2021 |
| 33252-0025 L0004 | UTL | ISSUED | US | OVERCHARGE-AWARE DRIVER FOR ELECTROCHROMIC DEVICES | 16/775,083 | 1/28/2020 | US 2020-0241379 A1 | 7/30/2020 | 11,467,463 | 10/11/2022 |
| 33252-0026 L0002 | UTL | ISSUED | US | AUTOMATED CONTROL OF AN ELECTROCHROMIC DEVICE | 16/821,293 | 3/17/2020 | US 2020-0301234 A1 | 9/24/2020 | 11,686,988 | 6/27/2023 |
| 33252-0027 L0018 | UTL | PENDING | US | PREDICTION AND CORRECTION OF HARDWARE FAILURES OF ELECTROCHROMIC DEVICES | 17/089,612 | 11/4/2020 | | | | |
| 33252-0028 L0007 TRK1 | UTL | ISSUED | US | REMOTE MANAGEMENT OF ON-SITE SMART WINDOW ACTIVITIES AND SCHEDULER OF SMART WINDOW EVENTS | 16/814,162 | 3/10/2020 | US 2020-0293186 A1 | 9/17/2020 | 11,169,681 | 11/9/2021 |
| 33252-0036 L0019 | UTL | PENDING | US | ADAPTIVE LEARNING BASED ON USER INPUT FOR ELECTROCHROMIC DEVICES | 17/084,447 | 10/29/2020 | | | | |
| 33252-0037 L0005C | UTL | ISSUED | US | CLOUD-BASED SYSTEM FOR CONTROLLING ELECTROCHROMIC DEVICES | 17/175,480 | 2/12/2021 | US 2021-0165297 A1 | 6/3/2021 | 11,409,180 | 8/9/2022 |

| LS Ref. | Type | Status | Country ID | Title | App. No. | Filing Date | Pub. No. | Pub. Date | Patent No. | Issue Date |
|---|---|---|---|---|---|---|---|---|---|---|
| 33252-0038 L0038US | UTL | PUBLISHED | US | SWITCHABLE GLASS WINDOW WITH AUTOMATIC CONTROL OF THE TRANSMISSION | 17/265,625 | 2/3/2021 | US 2021-0301587 A1 | 9/30/2021 | | |
| 33252-0045 L0039 | UTL | ISSUED | US | SKY SENSOR | 17/650,655 | 2/10/2022 | | | 11,831,997 | 11/28/2023 |
| 33252-0046 L0041 | UTL | ISSUED | US | CLOUD FORECASTING FOR ELECTROCHROMIC DEVICES | 17/987,783 | 11/15/2022 | US 2023-0154014 A1 | 5/18/2023 | 11,900,617 | 2/13/2024 |
| 33252-0047 L0041PCT | UTL | PUBLISHED | WO | CLOUD FORECASTING FOR ELECTROCHROMIC DEVICES | PCT/US22/50162 | 11/16/2022 | WO 2023/091523 | 5/25/2023 | | |
| 33252-0049 L0002D | UTL | ALLOWED | US | AUTOMATED CONTROL OF AN ELECTROCHROMIC DEVICE | 18/196,952 | 5/12/2023 | US 2023-0280628 A1 | 9/7/2023 | | |
| 33252-0050 L0015C3 | UTL | PUBLISHED | US | EXPERT SYSTEM FOR CONTROLLING LOCAL ENVIRONMENT BASED ON RADIANCE MAP OF SKY | 18/238,999 | 8/28/2023 | US 2024-0085865 A1 | 3/14/2024 | | |
| 33252-0051 L0039D | UTL | PENDING | US | SKY SENSOR DEVICE | 18/490,437 | 10/19/2023 | | | | |
| 33252-0052 L0041C | UTL | PENDING | US | CLOUD FORECASTING FOR ELECTROCHROMIC DEVICES | 18/403,691 | 1/3/2024 | | | | |

| Case Number | Cty | Sub | Type | App Status | Application Number | Filed | Patent Number | Issued | Patent Link |
|---|---|---|---|---|---|---|---|---|---|
| K85900 1040 | DE | | PCT | Granted | 16737757.1 | 8/2/17 | 3245558 | 5/10/23 | https://worldwide.espacenet.com/patent/search/family/056367493/publication/EP3245558A1?q=16737757.1 |
| K85900 1040 | GB | | PCT | Granted | 16737757.1 | 8/2/17 | 3245558 | 5/10/23 | https://worldwide.espacenet.com/patent/search/family/056367493/publication/EP3245558A1?q=16737757.1 |
| K85900 1040 | JP | | PCT | Granted | 2017-555452 | 7/12/17 | 6720210 | 6/19/20 | https://worldwide.espacenet.com/patent/search/family/056367493/publication/JP6720210B2?q=16737757.1 |
| K85900 1040 | US | 1 | ORD | Granted | 14/994,091 | 1/12/16 | 9563097 | 2/7/17 | https://patents.google.com/patent/US9563097B2/en?oq=9563097 |
| K85900 1040 | US | C1 | CON | Granted | 15/406,576 | 1/13/17 | 10831079 | 11/10/20 | https://patents.google.com/patent/US10831079B2/en?oq=10831079 |
| K85900 1040 | US | C2 | CON | Granted | 17/093,000 | 11/9/20 | 11852946 | 12/26/23 | https://patents.google.com/patent/US11852946B2/en?oq=11852946 |
| K85900 1040 | US | C3 | CON | Pending | 18/533,701 | 12/8/23 | not published yet | | |
| K85900 1050 | US | 1 | ORD | Granted | 14/994,094 | 1/12/16 | 9,658,508 | 5/23/17 | https://patents.google.com/patent/US9658508B1/en?oq=9%2c658%2c508 |
| K85900 1100 | US | 1 | PRI | Granted | 15/009,465 | 1/28/16 | 9823535 | 11/21/17 | https://patents.google.com/patent/US9823535B2/en?oq=9823535 |
| K85900 1100 | US | C1 | CON | Granted | 15/818,566 | 11/20/17 | 10,558,103 | 2/11/20 | https://patents.google.com/patent/US10558103B2/en?oq=10%2c558%2c103 |
| K85900 1100 | US | C2 | CON | Granted | 16/786,900 | 2/10/20 | 11697275 | 6/21/23 | https://patents.google.com/patent/US11697275B2/en?oq=11697275 |
| K85900 1100 | US | C3 | CON | Published | 18/330,960 | 6/7/23 | | | https://patents.google.com/patent/US20230311463A1/en?oq=18330960 |
| K85900 1100.1 | DE | | PCT | Granted | 16862989.7 | 5/22/18 | 602016051200.9 | 1/6/21 | https://worldwide.espacenet.com/patent/search/family/058662800/publication/EP3365167A1?q=16862989.7 |
| K85900 1100.1 | JP | | PCT | Granted | 2018-522942 | 5/7/18 | 6542474 | 6/21/19 | https://worldwide.espacenet.com/patent/search/family/058662800/publication/JP6542474B2?q=16862989.7 |
| K85900 1120 | CN | | PCT | Granted | 201480008071.4 | 8/7/15 | ZL201480008071.4 | 6/1/18 | https://worldwide.espacenet.com/patent/search/family/051207476/publication/CN105229526B?q=14740864.5 |
| K85900 1120 | DE | | EPP | Granted | 14740864.5 | 8/11/15 | 602014049827.2 | 7/10/19 | https://worldwide.espacenet.com/patent/search/family/051207476/publication/EP2946248A1?q=14740864.5 |
| K85900 1120 | GB | | EPP | Granted | 14740864.5 | 8/11/15 | 2946248 | 7/10/19 | https://worldwide.espacenet.com/patent/search/family/051207476/publication/EP2946248A1?q=14740864.5 |
| K85900 1120 | JP | | PCT | Granted | 2015-553896 | 7/15/15 | 6125047 | 4/14/17 | https://worldwide.espacenet.com/patent/search/family/051207476/publication/JP6125047B2?q=14740864.5 |
| K85900 1120 | US | 1 | ORD | Granted | 14/160,285 | 1/21/14 | 9,207,514 | 12/8/15 | https://patents.google.com/patent/US9207514B2/en?oq=9%2c207%2c514 |
| K85900 1120 | US | 2 | ORD | Granted | 14/160,365 | 1/21/14 | 9,377,663 | 6/28/16 | https://patents.google.com/patent/US9377663B2/en?oq=9%2c377%2c663 |
| K85900 1120 | US | C1 | CON | Granted | 14/961,709 | 12/7/15 | 10,095,079 | 10/9/18 | https://patents.google.com/patent/US10095079B2/en?oq=10%2c095%2c079 |
| K85900 1120 | US | C2 | CON | Granted | 16/153,284 | 10/5/18 | 10,739,657 | 8/11/20 | https://patents.google.com/patent/US10739657B2/en?oq=10%2c739%2c657 |
| K85900 1130 | CH | | EPP | Granted | 14740288.7 | 8/11/15 | 2946246 | 4/3/19 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/EP2946246A1?q=14740288.7 |
| K85900 1130 | CN | | PCT | Granted | 201480008081.8 | 8/7/15 | 105324706 | 7/24/18 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/CN105324706A?q=14740288.7 |
| K85900 1130 | DE | | EPP | Granted | 14740288.7 | 8/11/15 | 602014044011.8 | 4/3/19 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/EP2946246A1?q=14740288.7 |
| K85900 1130 | ES | | EPP | Granted | 14740288.7 | 8/11/15 | 2946246 | 4/3/19 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/EP2946246A1?q=14740288.7 |
| K85900 1130 | GB | | EPP | Granted | 14740288.7 | 8/11/15 | 2946246 | 4/3/19 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/EP2946246A1?q=14740288.7 |
| K85900 1130 | JP | | PCT | Granted | 2015-553893 | 7/15/15 | 5946977 | 6/10/16 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/JP5946977B2?q=14740288.7 |
| K85900 1130 | LI | | EPP | Granted | 14740288.7 | 8/11/15 | 2946246 | 4/3/19 | https://worldwide.espacenet.com/patent/search/family/051207477/publication/EP2946246A1?q=14740288.7 |
| K85900 1130 | US | 1 | ORD | Granted | 14/160,304 | 1/21/14 | 9,256,111 | 2/9/16 | https://patents.google.com/patent/US9256111B2/en?oq=9%2c256%2c111 |
| K85900 1130 | US | 2 | ORD | Granted | 14/160,394 | 1/21/14 | 9,341,910 | 5/17/16 | https://patents.google.com/patent/US9341910B2/en?oq=9%2c341%2c910 |
| K85900 1130 | US | C1 | CON | Granted | 14/992,628 | 1/11/16 | 9,753,348 | 9/5/17 | https://patents.google.com/patent/US9753348B2/en?oq=9%2c753%2c348 |
| K85900 1130 | US | C2 | CON | Granted | 15/675,192 | 8/11/17 | 10,845,666 | 11/24/20 | https://patents.google.com/patent/US10845666B2/en?oq=10%2c845%2c666 |
| K85900 1140 | US | 1 | ORD | Granted | 14/160,309 | 1/21/14 | 9,395,593 | 7/19/16 | https://patents.google.com/patent/US9395593B2/en?oq=9%2c395%2c593 |
| K85900 1140 | US | 2 | ORD | Granted | 14/160,401 | 1/21/14 | 9,360,729 | 6/7/16 | https://patents.google.com/patent/US9360729B2/en?oq=9%2c360%2c729 |
| K85900 1150 | US | 1 | ORD | Granted | 14/806,543 | 7/22/15 | 10,670,936 | 6/2/20 | https://patents.google.com/patent/US10670936B2/en?oq=10%2c670%2c936 |
| K85900 1150 | US | D1 | DIV | Granted | 16/889,505 | 6/1/20 | 11,384,435 | 7/12/22 | https://patents.google.com/patent/US11384435B2/en?oq=11%2c384%2c435 |
| K85900 1160 | US | 1 | ORD | Granted | 14/806,545 | 7/22/15 | 10,061,177 | 8/28/18 | https://patents.google.com/patent/US10061177B2/en?oq=10%2c061%2c177 |
| K85900 1160 | US | C1 | CON | Granted | 16/113,317 | 8/27/18 | 10,761,394 | 9/1/20 | https://patents.google.com/patent/US10761394B2/en?oq=10%2c761%2c394 |
| K85900 1160 | US | C2 | CON | Granted | 17/008,194 | 8/31/20 | 11,300,846 | 4/12/22 | https://patents.google.com/patent/US11300846B2/en?oq=11%2c300%2c846 |
| K85900 1200 | US | 1 | PRI | Granted | 13/961,508 | 8/7/13 | 9091895 | 7/28/15 | https://patents.google.com/patent/US9091895B2/en?oq=9091895 |
| K85900 1220 | CN | | PCT | Granted | 201680011181.5 | 1/12/16 | ZL201680011181.5 | 7/31/20 | |
| K85900 1220 | US | 1 | ORD | Granted | 14/994,087 | 1/12/16 | 9,581,877 | 2/28/17 | https://patents.google.com/patent/US9581877B2/en?oq=9%2c581%2c877 |
| K85900 1220 | US | C2 | CON | Granted | 16/017,901 | 6/25/18 | 10,698,286 | 6/30/20 | https://patents.google.com/patent/US10698286B2/en?oq=10%2c698%2c286 |
| K85900 1240 | US | 1 | PRI | Granted | 14/994,090 | 1/12/16 | 9720299 | 8/1/17 | https://patents.google.com/patent/US9720299B1/en?oq=9720299 |
| K85900 1240 | US | D1 | DIV | Granted | 15/662,740 | 7/28/17 | 10,723,835 | 7/28/20 | https://patents.google.com/patent/US10723835B2/en?oq=10%2c723%2c835 |
| K85900 1240 | US | D1C1 | CON | Granted | 16/940,169 | 7/27/20 | 11708449 | 7/5/23 | https://patents.google.com/patent/US11708449B2/en?oq=11708449 |
| K85900 1240 | US | D1C2 | CON | Published | 18/333,790 | 6/13/23 | | | https://patents.google.com/patent/US20230323014A1/en?oq=18333790 |
| K85900 1260 | US | 1 | ORD | Granted | 14/212,841 | 3/14/14 | 9,481,598 | 11/1/16 | https://patents.google.com/patent/US9481598B2/en?oq=9%2c481%2c598 |
| K85900 1260 | US | D1 | DIV | Granted | 15/267,096 | 9/15/16 | 10,241,376 | 3/26/19 | https://patents.google.com/patent/US10241376B2/en?oq=10%2c241%2c376 |
| K85900 1260 | US | D2 | DIV | Granted | 16/363,903 | 3/25/19 | 11,054,712 | 7/6/21 | https://patents.google.com/patent/US11054712B2/en?oq=11%2c054%2c712 |
| K85900 1270 | US | 1 | ORD | Granted | 14/994,092 | 1/12/16 | 10,316,581 | 6/11/19 | https://patents.google.com/patent/US10316581B1/en?oq=10%2c316%2c581 |
| K85900 1270 | US | C1 | CON | Granted | 16/435,825 | 6/10/19 | 10,941,613 | 3/9/21 | https://patents.google.com/patent/US10941613B1/en?oq=10%2c941%2c613 |

| Case Number | Cty | Sub | Type | App Status | Application Number | Filed | Patent Number | Issued | Patent Link |
|---|---|---|---|---|---|---|---|---|---|
| K85900 1280 | US | 1 | ORD | Granted | 14/994,093 | 1/12/16 | 9,677,327 | 6/13/17 | https://patents.google.com/patent/US9677327B1/en?oq=9%2c677%2c327 |
| K85900 1280 | US | C1 | CON | Granted | 15/620,686 | 6/12/17 | 10,280,682 | 5/7/19 | https://patents.google.com/patent/US10280682B1/en?oq=10%2c280%2c682 |
| K85900 1280 | US | C3 | CON | Granted | 16/820,380 | 3/16/20 | 11,066,872 | 7/20/21 | https://patents.google.com/patent/US11066872B2/en?oq=11%2c066%2c872 |
| K85900 1290 | US | 1 | ORD | Granted | 14/821,366 | 8/7/15 | 10,425,376 | 9/24/19 | https://patents.google.com/patent/US10425376B2/en?oq=10%2c425%2c376 |
| K85900 1300 | US | 1 | ORD | Granted | 14/821,371 | 8/7/15 | 9,470,947 | 10/18/16 | https://patents.google.com/patent/US9470947B2/en?oq=9%2c470%2c947 |
| K85900 1300 | US | D1 | DIV | Granted | 15/265,760 | 9/14/16 | 10,678,109 | 6/9/20 | https://patents.google.com/patent/US10678109B2/en?oq=10%2c678%2c109 |
| K85900 1310 | CN | | PCT | Granted | 201680055290.7 | 3/22/18 | ZL201680055290.7 | 8/6/21 | |
| K85900 1310 | US | 1 | ORD | Granted | 15/230,157 | 8/5/16 | 10,473,997 | 11/12/19 | https://patents.google.com/patent/US10473997B2/en?oq=10%2c473%2c997 |
| k85900 1320 | US | 1 | ORD | Granted | 15/230,056 | 8/5/16 | 10,663,832 | 5/26/20 | https://patents.google.com/patent/US10663832B1/en?oq=10%2c663%2c832 |
| K85900 1350 | US | 1 | PRI | Granted | 15/078,880 | 3/23/16 | 10,184,722 | 1/22/19 | https://patents.google.com/patent/US10184722B1/en?oq=10%2c184%2c722 |
| K85900 1380 | US | 1 | ORD | Granted | 15/691,297 | 8/30/17 | 10,539,860 | 1/21/20 | https://patents.google.com/patent/US10539860B2/en?oq=10%2c539%2c860 |
| K85900 1380 | US | C1 | CON | Granted | 16/748,612 | 1/21/20 | 10,921,694 | 2/16/21 | https://patents.google.com/patent/US10921694B2/en?oq=10%2c921%2c694 |
| K85900 1390 | US | 1 | ORD | Granted | 15/492,739 | 4/20/17 | 11,086,184 | 8/10/21 | https://patents.google.com/patent/US11086184B1/en?oq=11%2c086%2c184 |
| K85900 1410 | US | 1 | ORD | Granted | 15/685,935 | 8/24/17 | 11,269,230 | 3/8/22 | https://patents.google.com/patent/US11269230B2/en?oq=11%2c269%2c230 |
| K85900 1420 | US | 1 | ORD | Granted | 15/691,293 | 8/30/17 | 11,099,449 | 8/24/21 | https://patents.google.com/patent/US11099449B1/en?oq=11099449 |
| K85900 1430 | CN | | PCT | Granted | 201280008082.3 | 8/8/13 | 103370649 | 8/29/17 | |
| K85900 1430 | DE | | PCT | Granted | 12744192.1 | 7/19/13 | 2673674 | 10/17/18 | https://worldwide.espacenet.com/patent/search/family/046600484/publication/EP2673674A2?q=12744192.1 |
| K85900 1430 | GB | | EPP | Granted | 12744192.1 | 7/19/13 | 2673674 | 10/17/18 | https://worldwide.espacenet.com/patent/search/family/046600484/publication/EP2673674B1?q=12744192.1 |
| K85900 1430 | KR | | PCT | Granted | 10-2013-7021005 | 8/8/13 | 1613341 | 4/11/16 | https://worldwide.espacenet.com/patent/search/family/046600484/publication/KR20140041433A?q=12744192.1 |
| K85900 1430 | TW | | PCT | Granted | 101125903 | 7/18/12 | I528094 | 4/1/16 | |
| K85900 1430 | US | 1 | PRI | Granted | 13/370268 | 2/9/12 | 8717658 | 5/6/14 | https://patents.google.com/patent/US8717658B2/en?oq=8717658 |
| K85900 1430 | US | C1 | CON | Granted | 14/222,860 | 3/24/14 | 9,036,242 | 5/19/15 | https://patents.google.com/patent/US9036242B2/en?oq=9%2c036%2c242 |
| K85900 1430 | US | C2 | CON | Granted | 14/685,759 | 4/14/15 | 9823536 | 11/21/17 | https://patents.google.com/patent/US9823536B2/en?oq=9823536 |
| K85900 1430 | US | C2D1 | DIV | Granted | 15/818,564 | 11/20/17 | 10,437,128 | 10/8/19 | https://patents.google.com/patent/US10437128B2/en?oq=10%2c437%2c128 |
| K85900 1430 | US | C3D1 | CON | Granted | 16/594,948 | 10/7/19 | 11579508 | 2/14/23 | https://patents.google.com/patent/US11579508B2/en?oq=11579508 |
| K85900 1430 | US | C2D1C1D1 | CON | Granted | 18/168,533 | 2/13/23 | 11829044 | 11/28/23 | https://patents.google.com/patent/US11829044B2/en?oq=11829044 |
| K85900 1430 | US | C2D1C1D1C1 | CON | Published | 18/499,756 | 11/1/23 | | | https://patents.google.com/patent/US20240061302A1/en?oq=18499756 |
| K85900 1440 | US | C1 | CON | Granted | 14/750,480 | 6/25/15 | 9,606,410 | 3/28/17 | https://patents.google.com/patent/US9606410B2/en?oq=9%2c606%2c410 |
| K85900 1440 | US | C3 | CON | Granted | 16/133,519 | 9/17/18 | 10,627,692 | 4/21/20 | https://patents.google.com/patent/US10627692B2/en?oq=10%2c627%2c692 |
| K85900 1440 | US | C4 | CON | Granted | 16/853,106 | 4/20/20 | 11,520,205 | 12/6/22 | https://patents.google.com/patent/US11520205B2/en?oq=11%2c520%2c205 |
| K85900 1450 | DE | | EPP | Granted | 13827579.7 | 2/4/15 | 602013081915.7 | 6/22/22 | https://worldwide.espacenet.com/patent/search/family/050065999/publication/EP2883108A1?q=13827579.7 |
| K85900 1450 | GB | | EPP | Granted | 13827579.7 | 2/4/15 | 2883108 | 6/22/22 | https://worldwide.espacenet.com/patent/search/family/050065999/publication/EP2883108A1?q=13827579.7 |
| K85900 1450 | US | 1 | PRI | Granted | 13/961,508 | 8/7/13 | 9091895 | 7/28/15 | https://patents.google.com/patent/US9091895B2/en?oq=9091895 |
| K85900 1450 | US | C1 | CON | Granted | 14/750,576 | 6/25/15 | 9,606,411 | 3/28/17 | https://patents.google.com/patent/US9606411B2/en?oq=9%2c606%2c411 |
| K85900 1450 | US | C3 | CON | Granted | 16/011,412 | 6/18/18 | 10,871,695 | 12/22/20 | https://patents.google.com/patent/US10871695B2/en?oq=10%2c871%2c695 |
| K85900 1450 | US | C4 | CON | Granted | 17/129,333 | 12/21/20 | 11860499 | 1/2/24 | https://patents.google.com/patent/US11860499B2/en?oq=11860499 |
| K85900 1460 | US | 1 | ORD | Granted | 13/961,718 | 8/7/13 | 9,507,233 | 11/29/16 | https://patents.google.com/patent/US9507233B2/en?oq=9%2c507%2c233 |
| K85900 1460 | US | D1C1 | CON | Granted | 15/967,002 | 4/30/18 | 10,372,006 | 8/6/19 | https://patents.google.com/patent/US10372006B2/en?oq=10%2c372%2c006 |
| K85900 1460 | US | D1C2 | CON | Granted | 16/532,073 | 8/5/19 | 10,838,280 | 11/17/20 | https://patents.google.com/patent/US10838280B2/en?oq=10%2c838%2c280 |
| K85900 1460 | US | D1C3 | CON | Granted | 17/098,842 | 11/16/20 | 11874579 | 1/16/24 | https://patents.google.com/patent/US11874579B2/en?oq=11874579 |
| K85900 1470 | US | 1 | ORD | Granted | 15/820,867 | 11/22/17 | 11,194,213 | 12/7/21 | https://patents.google.com/patent/US11194213B2/en?oq=11%2c194%2c213 |
| K85900 1470 | US | C1 | CON | Allowed | 17/543,553 | 12/6/21 | Not yet Issued/publication attached | | https://patents.google.com/patent/US20220091470A1/en?oq=17%2f543%2c553 |
| K85900 1480 | CN | | PCT | Published | 201780072493.1 | 5/23/19 | | | |
| K85900 1480 | KR | | PCT | Granted | 10-2019-7018057 | 6/21/19 | 10-2094185 | 3/23/20 | |
| K85900 1480 | US | 1 | ORD | Granted | 15/820,881 | 11/22/17 | 10,210,368 | 2/19/19 | https://patents.google.com/patent/US10210368B2/en?oq=10%2c210%2c368 |
| K85900 1480 | US | C1 | CON | Granted | 16/278,553 | 2/18/19 | 10,579,842 | 3/3/20 | https://patents.google.com/patent/US10579842B2/en?oq=10%2c579%2c842 |
| K85900 1480 | US | C2 | CON | Granted | 16/806,859 | 3/2/20 | 10,997,383 | 5/4/21 | https://patents.google.com/patent/US10997383B2/en?oq=10%2c997%2c383 |
| K85900 1490 | US | 1 | ORD | Granted | 15/820,884 | 11/22/17 | 10,591,798 | 3/17/20 | https://patents.google.com/patent/US10591798B1/en?oq=10%2c591%2c798 |
| K85900 1490 | US | C1 | CON | Granted | 16/820,385 | 3/16/20 | 11,537,022 | 12/27/22 | https://patents.google.com/patent/US11537022B1/en?oq=11%2c537%2c022 |
| K85900 1510 | US | 1 | ORD | Granted | 15/820,891 | 11/22/17 | 10,372,007 | 8/6/19 | https://patents.google.com/patent/US10372007B1/en?oq=10%2c372%2c007 |
| K85900 1510 | US | C1 | CON | Granted | 16/504,102 | 7/5/19 | 10,768,503 | 9/8/20 | https://patents.google.com/patent/US10768503B1/en?oq=10%2c768%2c503 |
| K85900 1540 | US | 1 | ORD | Granted | 15/841,097 | 12/13/17 | 10,705,403 | 7/7/20 | https://patents.google.com/patent/US10705403B1/en?oq=10%2c705%2c403 |
| K85900 1550 | US | 1 | ORD | Granted | 15/588,522 | 5/5/17 | 10,386,688 | 8/20/19 | https://patents.google.com/patent/US10386688B1/en?oq=10%2c386%2c688 |
| K85900 1550 | US | C1 | CON | Granted | 16/544,764 | 8/19/19 | 11675242 | 1/19/22 | https://patents.google.com/patent/US11675242B1/en?oq=11675242 |

| Case Number | Cty | Sub | Type | App Status | Application Number | Filed | Patent Number | Issued | Patent Link |
|---|---|---|---|---|---|---|---|---|---|
| K85900 1550 | US | C2 | CON | allowed | 17/846,726 | 6/22/22 | not yet issues or published | | |
| K85900 1560 | US | 1 | ORD | Granted | 15/845,973 | 12/18/17 | 10,591,796 | 3/17/20 | https://patents.google.com/patent/US10591796B1/en?oq=10%2c591%2c796 |
| K85900 1560 | US | D1 | DIV | Granted | 16/820,374 | 3/16/20 | 10,877,347 | 12/29/20 | https://patents.google.com/patent/US10877347B1/en?oq=10%2c877%2c347 |
| K85900 1580 | US | 1 | ORD | Granted | 15/970,652 | 5/3/18 | 11,340,510 | 5/24/22 | https://patents.google.com/patent/US11340510B1/en?oq=11%2c340%2c510 |
| K85900 1590 | US | 1 | ORD | Granted | 15/970,676 | 5/3/18 | 10,901,284 | 1/26/21 | https://patents.google.com/patent/US10901284B2/en?oq=10%2c901%2c284 |
| K85900 1590 | US | C1 | CON | Granted | 17/157,076 | 1/25/21 | 11650471 | 4/26/23 | https://patents.google.com/patent/US11650471B1/en?oq=11650471 |
| K85900 1590 | EP | | PCT | allowed | 18794383.2 | | | | https://worldwide.espacenet.com/patent/search/family/064016712/publication/EP3602192A1?q=18794383.2 |
| K85900 1670 | US | 1 | ORD | Granted | 16/024,460 | 6/29/18 | 10,768,501 | 9/8/20 | https://patents.google.com/patent/US10768501B2/en?oq=10%2c768%2c501 |
| K85900 1680 | US | 1 | ORD | Granted | 16/410,551 | 5/13/19 | 11,187,955 | 11/30/21 | https://patents.google.com/patent/US11187955B2/en?oq=11%2c187%2c955 |
| K85900 1850 | US | 1 | ORD | Granted | 16/834,856 | 3/30/20 | 11732526 | 8/2/23 | https://patents.google.com/patent/US11732526B2/en?oq=11732526 |
| K85900 2000 | US | P1 | Provisional | Pending | 63/585,889 | 9/27/23 | | | |