Case: 24-1580 Document: 25-1 Page: 1

(1 of 20)

Case No.: 2024-1580

United States Court of Appeals for the Federal Court 717 Madison Place, N.W., Washington DC 20439

Massoud Heidary,

Plaintiff-Appellant

V.

Amazon.COM, Inc., Ring, LLC, Defendants-Appellees,

Appeal from the United States District court for District of Maryland, Case no. 8:22cv-02319-TDS, Hon. Theodore D. Chuang

BRIEF AND ATTACHEMENTS OF APPELLANT **Massoud Heidary**

Case: 24-1580 Document: 25-1 Page: 2 Filed: 10/29/2024

Case no.: 2024-1580

(2 of 20)

United States Court of Appeal for Federal Circuit 717 Madison Place, NW Washington DC 20439

Massoud Heidary 1335 Rockville Pike, Suite 211 Rockville, MD 20852

ARGUMENTS IN RESPONSE TO THE RESPONDENT/APPELLEE'S BRIEF

1.

The appellee's argument that Ring LLC should have a physical place of business is rejected by the fact that now a days many businesses do online sales to the residents of Maryland and collect sales taxes, this is also through for Ring LLC. Furthermore, we checked with the office of Taxation and Assessment in the state of Maryland and they informed us that Ring LLC has an agent lawyer registered (CSC, Lawyers registered) as their resident agent who receives all of the correspondences of Ring, LLC in state of Maryland (CSC-Lawyers incorporating Service Company, 7 ST. Paul Street, Suite 820, Baltimore, MD 21202). (Phone number for the office of Taxation and Assessment is 410-767-1184). Also, on 10/17/2022 through postal services a correspondence was mailed to Ring LLC in state of Maryland When I contacted the state of Maryland inquiring about the Ring LLC, they advised me that forward all your correspondence to their resident agent (CSC).

(3 of 20)

2, According to the state of Maryland any company that is trading business in state of Maryland, they are required to have a registered agent and the required tax numbers (Ring, LLC has resident agent and tax numbers) this proves that Ring, LLC does business in state of Maryland.

3. Unauthorized use of my patented invention by Ring LLC: Due to my financial situation and lack of funding, in 2019, I shared my design with Ring, LLC, in anticipation of a joint venture to implement and market my invention. However, without my consent, they used parts of my intention to sell and promote their products.

Ring LLC, used my invention without understanding even the technical terms which I used to design my three-smoke detector system. They used three smoke detectors in a zone and they called it three smoke detector system. Allow me to explain the three-smoke detector system in my patented design: assume there is a three floors house (bedrooms on top, hallways etc on second floor and basement in lower level). In a three smoke detector system, the fire's source can be on top floor, middle floor or basement), in my system, once a fire is detected on top floor then signal will be send to other floors and alarms will be activated; likewise if the source of the fire is on the hallway (second floor area), the signal will go to the bedrooms on top floor and also at the same time the signal goes to the basement activating all the alarms. If the fire starts on the basement then signals will be sent to other floors. My system has also additional features for HVAC etc which can be used in new and modern buildings.

I would like to explain that the first generation of the smoke detectors were only powered by batteries, unfortunately this was the problem, because many smoke detectors' batteries ran out of power and the smoke were not detected and was the cause of many fires. Because of this the national requirements were changed so the smoke detectors have to be powered by battery as well as direct electrical connections (and all installed components needed to be in compliance with <u>UL standard</u>). Any unit which is only operated by batteries are not in compliance with national code and UL proved.

Ring LLC took a portion of my design and developed and marketed.

(4 of 20)

Ring, LLC, utilized components of my invention, specifically the residential smoke detector, camera, and display unit, without my consent, which is central to my patent infringement claim. Ring LLC also failed to do proper implementation because any fixture such as a smoke detector should be powered by battery as well as electricity to comply with national codes.

Expectation of Fair Review:

My expectation is for a fair and just review of my case to protect my intellectual property rights. The trial court's decision was premature, and I was not given a fair opportunity to present my case. Please see the attachments supporting my claim, most of these attachments were previously submittd.

Massoud Heidary

Page: 5 Filed: 10/29/2024 Case: 24-1580 (5 of 20) Document: 25-1

Deliver to Massoud Gaithresbug 20877

All - ring smoke detectors



Account & Lists +

& Orders







FREE Returns Includes \$14.60 Prime savings

Save an extra 20% when you apply this coupon. Terms

Pay \$9.73/month for 6 months, interest-free upon approval for the Amazon Prime Rewards Visa Card

Style: 3-Pack (Wi-Fi Linked)

1-Pack (Wi-Fi Linked) \$23.99

3-Pack (Wi-Fi Linked) \$58.39

Brand **AEGISLINK**

Style 3-Pack (Wi-Fi Linked)

Power **Battery Powered**

Source

Item 3 x 3 x 2 inches

Dimensions LxWxH

Alarm

Audible

Sensor Photoelectric

Type

About this item

· Remote Controlled with Your Smartphone: Connect this Wi-Fi smoke detector to the TuyaSmart or Smart Life app on your phone via Bluetooth and remotely control the device even while you are away Dool Time Duch Matificatio

Secure transaction Ships from Amazon Sold by Aegislink US Return policy: Eligible for Return, Refund or Replacement within 30 days of receipt Add a Protection Plan: 3-Year Protection for \$6.99 4-Year Protection for \$9.99 Add a gift receipt for easy returns Add to List

Buy Now

Have one to sell? Sell on Amazon



Save 27%

Smoke Carbon Monoxide Detect...

\$6999 \$95.99 /prime

Sponsored

62 B1

rious additional features, including a signal to the teleione system, so that the controller can call the fire departent.

FIG. 1 is a block diagram illustrating the layout of smoke tector units in an embodiment of the present invention. In e current embodiment, three smoke detector systems own located in a single zone, however, more of less imber of smoke detector units per zone can be present pending upon the size of the building. Also, as shown in G. 3, the building can have more than one zones, each with set of smoke detection units and each set of smoke stection unit can be associated with corresponding relay, n controller and thermostat unit.

FIG. 1 shows three smoke detection units, 100A, 100B id 100C located in a fire zone 100. Each smoke detection nit comprises a smoke detector 105A, 105B and 105C and ich smoke detector is connected to an external power ipply 115A, 115B, 115C, as well as an auxiliary power ipply 110A, 110B, 100C. Further, each smoke detector is nnected to a camera 125A, 125B, 125C and the camera is princeted to a transmitter 120A, 120B, 120C. The system so comprises connection from each of the smoke detector alarms to a normally closed relay 140. The relay 140 is onnected to a fan controller 145 and a thermostat 150. pon receiving the signal from the smoke detector, the relay its-off the power supply to the fan controller and the ermostat. In addition the system comprises a display unit 50 connected to a micro controller 165, and a microontroller wireless receiver 170.

In the embodiment of FIG. 2, most of the features are the ma as that of EIC 1 but the emoke detector is connected



(6 of 20)

US 10,380,862 B1

FIRE PROTECTION SYSTEM WITH FAN SHUT OFF, INCLUDING A CAMERA AND A DISPLAY UNIT

BRIEF SUMMARY

Field of the Invention

The present invention relates fire protection system with automatic fan shut off, including a camera and a display unit.

SUMMARY OF THE INVENTION

Embodiments Of the present invention provide system for suppressing the spread of fire by shutting off the fan in a heating, ventilation, and air conditioning (HVAC) system when a fire is detected by the smoke detector. In one embodiment, the a system for suppressing the fire comprises a smoke detector with a transmitter, transmitting signal to an 20 HVAC interface, a receiver operable to receive a signal indicating the presence of fire, and in response, send a signal to the HVAC interface to cause the HVAC system to be shut down. The system, in addition includes a camera system. turned on and the signal is sent to a display unit informing the occupant the location of the fire.

In case of large building with more than one HVAC systems, the fire suppression system is designed to send signal to the affected HVAC system and cause the HVAC 30 system to shut down.

Further details and advantages of the present invention are set forth below.

BRIEF DESCRIPTION OF THE FIGURES

The features, aspects, and advantages of the present invention are better understood when the following Detailed Description is read with reference to the accompanying drawings, wherein:

FIG. 1 is a block diagram illustrating the layout of smoke detectors with HVAC shut off system in a residential setting in an embodiment of the present invention complete with cameras and a display system incorporating a relay system for HVAC shut-off system.

FIG. 2 is a block diagram illustrating the layout of smoke detectors with HVAC shut off system in a residential setting in an embodiment of the present invention complete with cameras and a display system, incorporating wireless signal transmitter to HVAC shut off system.

FIG. 3 is a general layout of a building incorporating more than one HVAC system.

DETAILED DESCRIPTION

Embodiments of the present invention, a smoke alarm detects the fire, the smoke alarm is linked to a controller. The controller shuts off a fan in a forced air residential HVAC system, depriving the fire of the combustion air necessary to grow and spread and stopping the advance and transfer of 60 fire-related toxins. In various embodiments, the controller may be a simple relay installed internally or externally to the HVAC system and connected to the fan controller and thermostat. In other embodiments, the relay is connected to a wireless receiver and receives the signal from the smoke 65 detector transmitter to shut off the fan controller and thermostat. Embodiments of the present invention may include

various additional features, including a signal to the telephone system, so that the controller can call the fire depart-

Filed: 10/29/2024

FIG. 1 is a block diagram illustrating the layout of smoke detector units in an embodiment of the present invention. In the current embodiment, three smoke detector systems shown located in a single zone, however, more of less number of smoke detector units per zone can be present depending upon the size of the building. Also, as shown in 10 FIG. 3, the building can have more than one zones, each with a set of smoke detection units and each set of smoke detection unit can be associated with corresponding relay. fan controller and thermostat unit.

FIG. 1 shows three smoke detection units, 100A, 100B and 100C located in a fire zone 100. Each smoke detection unit comprises a smoke detector 105A, 105B and 105C and each smoke detector is connected to an external power supply 115A, 115B, 115C, as well as an auxiliary power supply 110A, 110B, 100C. Further, each smoke detector is connected to a camera 125A, 125B, 125C and the camera is connected to a transmitter 120A, 120B, 120C. The system also comprises connection from each of the smoke detector or alarms to a normally closed relay 140. The relay 140 is connected to a fan controller 145 and a thermostat 150. Upon detection of fire by the smoke detector, the camera is 25 Upon receiving the signal from the smoke detector, the relay cuts-off the power supply to the fan controller and the thermostat. In addition the system comprises a display unit 160 connected to a micro controller 165, and a microcontroller wireless receiver 170.

> In the embodiment of FIG. 2, most of the features are the same as that of FIG. 1, but the smoke detector is connected to a transmitter 130A, 130B, 130C and the relay comprises a wireless receiver for fan controller 155.

So, in the embodiment of FIG. 1, when any of the smoke 35 detector 105A, 105B, 105C, detects the smoke, the smoke detector sounds an alarm and a signal is sent to the relay, which in turn cuts-off the power supply to the fan controller and the thermostat, thereby cutting off the air supply to the affected area. At the same time, the wireless transmitter 40 120A, 120B, 120C of camera sends a signal to the receiver 170 of micro-controller 165, which displays the location of fire including the floor number, room number, etc., which is then displayed on display unit 160. The micro-controller 165 could be also send a signal to the fire department through 45 telephone system 175, informing of the location of the fire to the fire department.

In the embodiment of FIG. 1, the smoke detector 105A, 105B, 105C is connected to the relay 140 using wires, however, in the embodiment of FIG. 2, the smoke detectors are provided with a transmitters 130A, 130B, 130C and the relay comprises a wireless receiver 155 for fan controller 145, so the signal is transmitted wirelessly and no hard wires are provided between the smoke detector and the relay. So, for embodiment of FIG. 2, when any of the smoke detector 55 105A, 105B, 105C, detects the smoke, the smoke detector sounds an alarm and a signal is wirelessly sent to the wireless receiver 155 connected to the relay 140, which in turn disconnects the fan controller 145 and thermostat 150, thereby cutting off the air supply to the affected area. At the same time, the wireless transmitter 120A. 120B, 120C of camera sends a signal to the receiver 170 of micro-controller 165, which displays the location of fire including the floor number, room number, etc., which is then displayed on display unit 160.

In the embodiment of FIGS. 1 and 2, the micro-controller 165 could be also send a signal to the fire department through telephone system 175, informing of the location of



Email All Attorneys

Email All Attorneys and Additional Recipients

Date Filed	#	Docket Text
09/13/2022	1	COMPLAINT against Amazon.com, Inc., Ring, LLC (Filing fee \$ 402 receipt number 362.), filed by Massoud Heidary. (Attachments: # 1 Civil Cover Sheet, # 2 Attachment, # 3 Summons)(ybs, Deputy Clerk) (Entered: 09/13/2022)
09/13/2022	2	New Case Notification Letter sent to Massoud Heidary. (c/m 9/13/2022 ybs, Deputy Clerk) (Entered: 09/13/2022)
09/13/2022	3	Deficiency Notice Report on Filing Patent/Trademark form (AO 120) has not been filed. The form is located at http://www.mdd.uscourts.gov/publications /DisplayForms.asp?ActiveTab=Civil . Please fully complete and file the form by selecting Civil > Other Filings > Other Documents > Report on Filing Patent/Trademark. The form must be filed by 9/20/2022 (c/m 9/13/2022 ybs, Deputy Clerk) (Entered: 09/13/2022)
09/13/2022		Case Reassigned to Judge Theodore D. Chuang. Magistrate Judge Gina L Simms no longer assigned to the case. (jf3s, Deputy Clerk) (Entered: 09/14/2022)
09/16/2022	4	CASE MANAGEMENT ORDER. Signed by Judge Theodore D. Chuang on 9/16/2022. (ds2s, Deputy Clerk) (Entered: 09/16/2022)
09/20/2022	5	Report on Filing Patent/Trademark (ols, Deputy Clerk) (Entered: 09/20/2022)
10/03/2022	6.	ORDER directing Plaintiff to provide a summons for each Defendant; directing Plaintiff to notify the Court of any changes to address. Signed by Judge Theodore D. Chuang on 9/30/2022. (c/m 10/3/2022 ybs, Deputy Clerk) (Entered: 10/03/2022)
10/14/2022	7	Correspondence re: response to letter dated October 7, 2022 filed by Massoud Heidary (Attachments: # 1 Envelope)(ybs, Deputy Clerk) (Entered: 10/14/2022)
10/28/2022	8	Proposed Summons filed by Massoud Heidary (ybs, Deputy Clerk) (Entered: 10/28/2022)
10/28/2022	9	Correspondence regarding service filed by Massoud Heidary (Attachments: # 1 Attachment, # 2 Attachment)(ybs, Deputy Clerk) (Entered: 10/28/2022)
11/16/2022	10	Correspondence requesting summary judgment filed by Massoud Heidary (Attachments: # 1 Attachment 1, # 2 Attachment 2)(ybs, Deputy Clerk) (Entered: 11/16/2022)
11/29/2022	11	ORDER directing Plaintiff to provide corrected summons for each Defendant; directing Plaintiff to serve each Defendant by February 28, 2023. Signed by Judge Theodore D. Chuang on 11/28/2022. (c/m w forms 11/29/2022 ybs, Deputy Clerk) (Entered: 11/29/2022)
12/05/2022	12	Correspondence re: Proposed Summons filed by Massoud Heidarv (Attachments: # Summons)(ybs, Deputy Clerk) (Entered: 12/05/2022)
12/05/2022	13	Documents filed by Massoud Heidary (Attachments: # 1 Attachment)(ybs, Deputy Clerk) (Entered: 12/05/2022)





Massoud Heidary <massoud1.mh@gmail.com>

Residential vs Comercial Fire Alarm Systems

3 messages

Carlos De Armas <dearmas.carlos@gmail.com> To: "massoud1.MH@gmail.com" <massoud1.MH@gmail.com>

Thu, Jan 19, 2023 at 8:44 AM

Hi Massoud,

Residential Fire Alarm Systems is a series of smoke detectors that can be a smoke detector or a combination smoke/carbon monoxide detector. These detectors are interconnected throughout the residence or apartment to alert occupants of the presence of smoke combustion particles in the air. Also, they are powered by 110V and have their own dedicated circuit breaker in the electric panel. They are also known as "Single station smoke detectors" where they work independently "without a fire alarm control panel. On the other hand, commercial fire alarm systems are more complex and are based on a series of detectors, manual stations, notification appliances, modules and relays working together and reporting to a fire alarm control panel as one source or point of reset. They are powered by a 110v dedicated circuit breaker but have a battery backup to continue operating for 5 to 15 minutes in alarm condition and 24 hours in supervisory condition. These panels send alarm, trouble and supervisory signals to the monitoring company or central station for proper course and/or notify the fire department to send the fire fighters to the premises.

I hope this helps!

Carlos

Carlos De Armas <dearmas.carlos@gmail.com> To: "massoud1.MH@gmail.com" <massoud1.MH@gmail.com>

Thu, Jan 19, 2023 at 11:10 AM

Montgomery County, Maryland Adopted Code is NFPA 73, National Fire Alarm and Signaling Code 2013 Edition

Please see code sections below:

3.3.262 Single-Station Alarm. A detector comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation. (SIG-HOU)

3.3.263 Single-Station Alarm Device. An assembly that incorporates the detector, the control equipment, and the alarmsounding device in one unit operated from a power supply either in the unit or obtained at the point of installation. (SIG-HOU)

3.3.66 Detector. A device suitable for connection to a circuit that has a sensor that responds to a physical stimulus such as gas, heat, or smoke. (SIG-IDS)

2013 Edition

3.3.66.2 Automatic Fire Detector. A device designed to detect the presence of a fire signature and to initiate action. For the purpose of this Code, automatic fire detectors are classified as follows: Automatic Fire Extinguishing or Suppression System Operation Detector, Fire-Gas Detector, Heat Detector, Other Fire Detectors, Radiant Energy-Sensing Fire Detector, and Smoke Detector. (SIG-IDS)

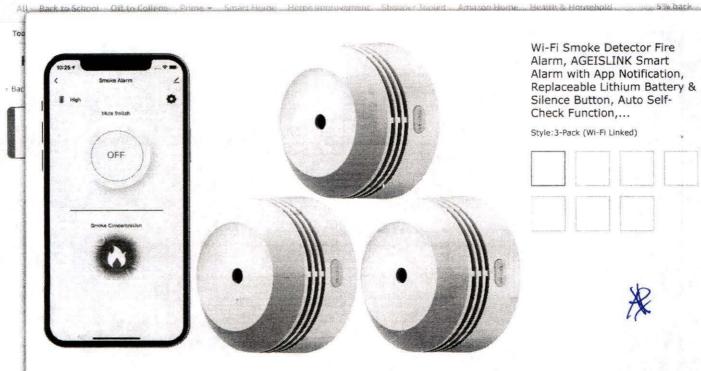
The main difference between the single station detectors and commercial smoke detectors is:

Deliver to Massoud

ring smoke detectors All #

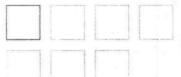


Account & Lists & Orders



Wi-Fi Smoke Detector Fire Alarm, AGEISLINK Smart Alarm with App Notification, Replaceable Lithium Battery & Silence Button, Auto Self-Check Function,...

Style: 3-Pack (Wi-Fi Linked)





Roll over image to zoom in



One-Day

FREE Returns Includes \$14,60 Prime savings

Save an extra 20% when you apply this coupon. Terms

Pay \$9.73/month for 6 months, interest-free upon approval for the Amazon Prime Rewards Visa Card

Style: 3-Pack (Wi-Fi Linked)

1-Pack (Wi-Fi Linked) \$23.99

3-Pack (Wi-Fi Linked) 553.39

Brand **AEGISLINK**

Style 3-Pack (Wi-Fi Linked)

Battery Powered

Power Source

Item 3 x 3 x 2 inches

Dimensions LxWxH

Alarm Audible

Sensor Photoelectric

Type

About this item

· Remote Controlled with Your Smartphone: Connect this Wi-Fi smoke detector to the TuyaSmart or Smart Life app on your phone via Bluetooth and remotely control the device even while you are away

Buy Now

Secure transaction

Ships from Amazon Sold by Aegislink US

Return policy: Eligible for Return, Refund or Replacement within 30 days of receipt

Add a Protection Plan:

3-Year Protection for \$6.99

4-Year Protection for \$9.99

Add a gift receipt for easy returns

Add to List

Have one to sell? Sell on Amazon



Save 27%

Smoke Carbon Monoxide Detect...

\$6999 \$95.99 /prime

Sponsored

Case: 24-1580 Document: 25-2 Page: 1 Filed: 10/29/2024 (11 of 20)

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

MASSOUD HEIDARY,

Plaintiff-Appellant

v.

AMAZON.COM, INC., RING, LLC,

Defendants-Appellees

2024-1580

Appeal from the United States District Court for the District of Maryland in No. 8:22-cv-02319-TDC, Judge Theodore D. Chuang.

Decided: October 15, 2024

MASSOUD HEIDARY, Gaithersburg, MD, pro se.

JENNIFER LIBRACH NALL, DLA Piper LLP (US), Austin, TX, for defendants-appellees. Also represented by ANKUR VIJAY DESAI, Washington, DC; STANLEY JOSEPH PANIKOWSKI, III, San Diego, CA.

Before LOURIE, PROST, and STARK, Circuit Judges.

Lourie, Circuit Judge.

Massoud Heidary appeals from a decision of the U.S. District Court for the District of Maryland dismissing Heidary's patent infringement claims for improper venue and failure to state a claim. *Heidary v. Amazon.com*, *Inc.*, 706 F. Supp. 3d 525 (D. Md. 2023) ("*Decision*"). For the following reasons, we *affirm*.

BACKGROUND

Heidary owns U.S. Patent 10,380,862 ("the '862 patent"), which issued on August 13, 2019. The '862 patent is directed to a "fire protection system" for suppressing fire spread by shutting off the fan in an HVAC system when a fire is detected by a smoke detector. '862 patent col. 1 ll. 9–18. Claim 1 of the '862 patent reads as follows:

- 1. A system for suppressing fire in a building, the system comprising:
 - a plurality of smoke detector units,

each smoke detector unit comprising:

a smoke detector.

a power supply,

an auxiliary power supply,

- a camera connected to the smoke detector, and
- a wireless transmission unit connected to the camera.

a normally closed relay,

- a fan controller connected to an HVAC unit,
- a thermostat,

HEIDARY v. AMAZON.COM, INC.

- a display unit,
- a micro-controller for the display unit,
- a wireless receiver for the micro-controller,
- a telephone system,

wherein upon detection of a smoke by any one of the smoke detectors, the respective smoke detector passes a signal to a normally closed relay to open and to cut-off the power supply to the thermostat as well as fan controller thereby shutting off the fan unit; and activates the respective camera and the wireless transmission unit to transmit a signal to a wireless receiver connected to the micro-controller so as to display the location of the fire on the display unit connected to the micro-controller.

'862 patent col. 3 ll. 6-31.

Heidary filed the present suit against Amazon.com, Inc. ("Amazon") and Ring, LLC ("Ring") (collectively "Appellees") on September 13, 2022, alleging patent infringement. *Decision*, 706 F. Supp. 3d at 528–29. According to Heidary's complaint, Amazon sells two specific products—the X-SENSE Wi-Fi Smoke Alarm and the Aegislink Wi-Fi Smoke Alarm (collectively the "accused products")—that meet each and every limitation of claim 1 of the '862 patent. S.A. 30–31, ¶¶ 12–13.1

Ring moved to dismiss Heidary's complaint for improper venue under Rule 12(b)(3) and Appellees jointly moved to dismiss for failure to state a claim of patent infringement under Rule 12(b)(6) of the Federal Rules of Civil Procedure. *Decision*, 706 F. Supp. 3d at 529–30. Specifically, Ring contended that Heidary failed to show that

¹ "S.A." refers to the supplemental appendix included with Appellees' informal brief.

Ring resides in or has a regular and established place of business in the District of Maryland. *Id.* Appellees further contended that Heidary did not plead facts sufficient to show that either of the accused products plausibly contains each and every limitation of claim 1 of the '862 patent and thus there can be no direct infringement. *Id.* at 533–34. Given their contention that the predicate act of direct infringement failed, Appellees argued Heidary's inducement infringement claim necessarily failed as well. *Id.* at 534–35.

The district court granted Appellees' motions and dismissed the complaint without prejudice. *Decision*, 706 F. Supp. 3d at 535.

* * *

Heidary initially appealed his case to the U.S. Court of Appeals for the Fourth Circuit, and the Fourth Circuit subsequently transferred the case to this court. *Heidary v. Amazon.com, Inc.*, No. 24-1012 (4th Cir. Mar. 12, 2024), ECF No. 11 (order transferring appeal to this court). We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

Heidary challenges the district court's decision to dismiss the complaint for each of (1) improper venue as to Ring and (2) failure to adequately plead patent infringement. We discuss each issue in turn.

T

We first address whether the district court erred in determining that the claims against Ring must be dismissed due to improper venue. We apply our own law when reviewing a motion to dismiss under Rule 12(b)(3) regarding improper venue pursuant to 28 U.S.C. § 1400(b) because "[§ 1400(b) venue] is an issue unique to patent law and is therefore governed by Federal Circuit precedent." *Valeant Pharms. N. Am. LLC v. Mylan Pharms. Inc.*, 978 F.3d

1374, 1381 (Fed. Cir. 2020). We review whether venue is proper under § 1400(b) de novo. Westech Aerosol Corp. v. 3M Co., 927 F.3d 1378, 1381 (Fed. Cir. 2019).

Under § 1400(b), "[a]ny civil action for patent infringement may be brought in the judicial district where the defendant resides or where the defendant has committed acts of infringement and has a regular and established place of business." 28 U.S.C. § 1400(b). It is the plaintiff's burden to establish proper venue. Westech, 927 F.3d at 1382.

A "domestic corporation 'resides' only in its State of incorporation for purposes of the patent venue statute." TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 581 U.S. 258, 262 (2017). If the defendant does not reside in the relevant district, then venue is only proper if each of the following requirements are met: "(1) there must be a physical place in the district; (2) it must be a regular and established place of business; and (3) it must be the place of the defendant." In re Cray Inc., 871 F.3d 1355, 1360 (Fed. Cir. 2017).

The district court concluded that Heidary failed to establish that venue is proper for Ring. Decision, 706 F. Supp. 3d at 530. We agree.

Heidary's complaint alleged that "Ring, LLC ('Ring') is [a] Limited Liability company and exists under the laws of the State of Delaware." S.A. 29, ¶ 5. As a Delaware entity, and not a Maryland corporation, Ring does not reside in the District of Maryland for patent venue purposes.² Accordingly, Heidary could only establish that venue is proper as to Ring if he alleged or established that Ring has

We have applied TC Heartland's holding to venue issues relating to LLCs, like Ring. See In re Google LLC, 949 F.3d 1338 (Fed. Cir. 2020) (applying, without discussion, TC Heartland's "corporation" standard to an LLC). The parties neither dispute nor address this potential issue, so neither do we.

committed infringing acts in Maryland and that it has a regular and established place of business in that state. See 28 U.S.C. § 1400(b). In that regard, the district court correctly determined that Heidary pleaded no facts and otherwise made no showing that Ring has a physical place of business in the District of Maryland. See S.A. 29, ¶¶ 5–9 (failing to make allegations regarding Ring's physical presence in the District of Maryland). Absent such plausible allegations, the district court correctly ordered the dismissal of the claims against Ring due to improper venue.

П

We next turn to whether the district court erred in dismissing Heidary's claims of direct infringement. Appellees jointly moved to dismiss Heidary's direct infringement claims, and the district court granted this motion. *Decision*, 706 F. Supp. 3d at 535. Therefore, we will consider the correctness of the district court's decision on infringement with respect to both parties.

This court applies the law of the regional circuit, which here is the Fourth Circuit, when reviewing a motion to dismiss under Rule 12(b)(6). In re Bill of Lading Transmission & Processing Sys. Pat. Litig., 681 F.3d 1323, 1331 (Fed. Cir. 2012). The Fourth Circuit reviews challenges to a dismissal for failure to state a claim under Rule 12(b)(6) de novo. E.I. du Pont de Nemours & Co. v. Kolon Indus., 637 F.3d 435, 440 (4th Cir.2011). To survive a motion to dismiss in the Fourth Circuit, "a plaintiff must plead enough factual allegations to state a claim to relief that is plausible on its face." Bing v. Brivo Sys., LLC, 959 F.3d 605, 616 (4th Cir. 2020) (quoting Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009)). However, "[w]e apply our own law to the specific question of whether a complaint states a claim of patent infringement on which relief may be granted." AlexSam, Inc. v. Aetna, Inc., No. 2022-2036, 2024 WL 4439292, at *4 (Fed. Cir. Oct. 8, 2024).

Pleadings must be "construe[d]...liberally" for pro se litigants. Bing, 959 F.3d at 618. However, "liberal construction does not mean overlooking the pleading requirements under the Federal Rules of Civil Procedure." Id. (citing Weidman v. Exxon Mobil Corp., 776 F.3d 214, 219 (4th Cir. 2015)). Thus, a pro se litigant still must plead "factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." Iqbal, 556 U.S. at 678 (citing Bell Atl. Corp. v. Twombly, 550 U.S. 544, 556 (2007)).

On appeal, Heidary contends that the district court erred by prematurely dismissing the patent infringement claim on the basis that the district court did not consider the "totality" of the '862 patent in its infringement analysis. Appellant's Br. 2. Appellees respond that the accused products cannot plausibly constitute the "complete" invention of the '862 patent based on the pleadings, and thus Heidary failed to state a claim under Rule 12(b)(6). Appellees' Br. 6.

While it is not required that a plaintiff detail how each limitation of a claim is infringed, the plaintiff cannot list the claim limitations in his complaint and "merely conclud[e] that the accused product has those [limitations]." Bot M8 LLC v. Sony Corp. of Am., 4 F.4th 1342, 1352–53 (Fed. Cir. 2021). Rather, "[t]here must be some factual allegations that, when taken as true, articulate why it is plausible that the accused product infringes the patent claim." *Id*.

Direct infringement arises under 35 U.S.C. § 271(a), which specifies that "whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . infringes the patent." For direct infringement, "one or more claims of the patent [must] read on the accused device" Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1310 (Fed. Cir. 2005). A claim reads on the accused device only if "each

and every limitation set forth in a claim appear[s] in an accused product." V-Formation, Inc. v. Benetton Grp. SpA, 401 F.3d 1307, 1312 (Fed. Cir. 2005).

Heidary's complaint does nothing more than list what Heidary contends are the limitations of his claim 1 and assert that Amazon "make[s], sell[s], use[s], offer[s] to sell, or import[s] in the United States products . . . that meet each and every limitation of claim 1." S.A. 30, ¶¶ 12–13. This is insufficient to state a plausible claim of patent infringement.

More particularly, as the district court explained, "there is a facially apparent disconnect between the '862 patent and the [accused products]." Decision, 706 F. Supp. 3d at 533. The '862 patent claims a system with multiple components. Specifically, claim 1 of the '862 patent recites a complete "system for suppressing fire" that includes "a plurality of smoke detectors" where each smoke detector comprises, among other components, "a fan controller connected to an HVAC unit, a thermostat, a display unit, a micro-controller for the display unit, a wireless receiver for the micro-controller, [and] a telephone system." Decision, 706 F. Supp. 3d at 534; see also '862 patent col. 3 ll. 6–31 (independent claim 1). Meanwhile, as the district court stated, the accused products "appear to consist of only smoke detector devices, not a complete 'fire protection system with fan shut off, including a camera and a display unit." Decision, 706 F. Supp. 3d at 534 (emphasis added). Therein lies the facially apparent disconnect. The '862 patent claims a fire protection system, but the accused devices are merely a single component of that system.

Moreover, because "a patent on a combination is a patent on the assembled or functioning whole, not on the separate parts," Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680, 684 (1944), without additional factual allegations, the district court determined it was left with no choice but to conclude that the accused products did not plausibly consist of the complete invention of the asserted claims of the '862 patent, and it therefore granted the motion to dismiss as to the direct infringement claim. *Decision*, 706 F. Supp. 3d at 534.

We agree. Heidary's complaint fails to sufficiently plead a claim for direct infringement. With his complaint, Heidary submitted a screenshot depicting one of the accused products, which appears to be a Wi-Fi enabled smoke detector, and summarily concluded the accused products infringe claim 1 without more. S.A. 34. Although Heidary is not required to attach claim charts or allege how each limitation of a claim is infringed, Heidary must still "articulate why it is plausible that the accused product infringes the patent claim." Bot M8, 4 F.4th at 1352–53 (emphasis added). Neither the screenshot nor Heidary's complaint provides any reason to plausibly conclude that the accused products are a complete fire protection system as claimed by the '862 patent. In fact, the screenshot merely appears to show that one of the accused products is a standalone smoke detector device, which accounts for just one of the 13 limitations recited by claim 1 of the '862 patent. S.A. 30, ¶ 13. He provides no allegations that the accused products include anything further.

Nor do the complaint and screenshot indicate that the other components of claim 1, e.g., '862 patent col. 3 ll. 16–21 ("a fan controller connected to an HVAC unit, a thermostat, a display unit, a micro-controller for display unit, a wireless receiver for the micro-controller, [and] a telephone system"), are present in the accused products. These materials also do not plausibly convey that the accused products possess the functionality of the component limitations of claim 1, e.g., id. at col. 3 ll. 22–26 ("wherein upon detection of a smoke . . . the respective smoke detector passes a signal to a normally closed relay to open and to cut-off the power supply to the thermostat as well as fan controller thereby shutting off the fan unit").

9

Indeed, even on appeal, Heidary appears to concede that the accused products do not plausibly infringe claim 1 of the '862 patent because the Appellees used only "part" of his invention. See Appellant's Reply Br. 2 ("[Appellees] used part of my invention (residential smoke detector and camera and display unit) to sell and promote smoke detector and camera and display unit." (emphasis added)).

We therefore agree with the district court that Heidary failed to state a claim of direct infringement and as such the claim must be dismissed.³

III

Without a predicate finding of direct infringement, there can be no finding of induced infringement. See Limelight Networks, Inc. v. Akamai Techs., Inc., 572 U.S. 915, 922 (2014). Because Heidary failed to adequately plead direct infringement, we agree with the district court that Heidary's "induced infringement claim necessarily fails." Decision, 706 F. Supp. 3d at 535.

Conclusion

We have considered Heidary's remaining arguments and find them unpersuasive. For the foregoing reasons, we affirm.

AFFIRMED

Even though the dismissal was without prejudice, the docket shows no effort by Heidary to file an amended complaint. Instead, he chose to appeal within three weeks of when the district court issued its dismissal order. S.A. 27.