

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**ROTHSCHILD CONNECTED DEVICES  
INNOVATIONS, LLC,**  
*Plaintiff-Appellant*

v.

**COCA-COLA COMPANY,**  
*Defendant-Appellee*

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2019-1825

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Appeal from the United States District Court for the  
Northern District of Georgia in No. 1:16-cv-01241-TWT,  
Judge Thomas W. Thrash, Jr.

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Decided: May 18, 2020

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JOHN C. CAREY, Carey, Rodriguez, Greenberg & Paul,  
LLP, Miami, FL, argued for plaintiff-appellant.

ALAN SHANE NICHOLS, Alston & Bird LLP, Atlanta, GA,  
argued for defendant-appellee. Also represented by ANA  
(NAH EUN) KIM.

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Before PROST, *Chief Judge*, DYK and O'MALLEY, *Circuit Judges*.

PROST, *Chief Judge*.

Rothschild Connected Devices Innovation, LLC (“RCDI”) sued Coca-Cola Company (“Coca-Cola”), alleging that Coca-Cola’s Freestyle beverage dispensers infringe independent claim 11, and various claims depending on claim 11, of U.S. Patent No. 8,417,377 (“the ’377 patent”). After construing relevant claim limitations, the district court granted Coca-Cola’s motion for summary judgment of non-infringement. More specifically, the district court concluded that the Freestyle dispensers did not have the claimed “user interface module.” See ’377 patent claim 11. The district court also dismissed the case as to the asserted dependent claims by virtue of its “inherent authority to manage the affairs of its cases.” *Rothschild Connected Devices Innovations, LLC v. Coca-Cola Co.*, 389 F. Supp. 3d 1169, 1178–79 (N.D. Ga. 2019) (“*Summary Judgment Opinion*”).

RCDI appealed. For the reasons below, we vacate and remand for further proceedings.

## BACKGROUND

### I

The Freestyle is a line of beverage dispensers by Coca-Cola. Users can employ the dispenser’s touchscreen (part of the “Blister” interface) to scroll through and select various drink choices. Users can also interact with the dispenser via the Freestyle phone application (“the Freestyle app”). With the Freestyle app, users can connect to the relevant servers to register their identities and customized beverage preferences (e.g., equal mix of Coca-Cola and Sprite). Then, users can approach a Freestyle dispenser and scan, with their phone in conjunction with the Freestyle app, a QR code displayed by the Blister touchscreen. This scan prompts the Freestyle app to connect to the

relevant servers to retrieve the user's preferred beverages for dispensing.

## II

RCDI owns the '377 patent, which relates in relevant part to a beverage dispenser that can receive a user's identity and, on the basis of previously stored beverage preferences for that user, dispense the user's preferred beverage. Claim 11, the asserted independent claim, recites:

11. A beverage dispenser comprising:

at least one compartment containing an element of a beverage;

at least one valve coupling the at least one compartment to a dispensing section configured to dispense the beverage;

a mixing chamber for mixing the beverage;

*a user interface module configured to receive an[] identity of a user and an identifier of the beverage;*

a communications module configured to transmit the identity of the user and the identifier of the beverage to a server over a network, receive user generated beverage product preferences based on the identity of the user and the identifier of the beverage from the server and communicat[e] the user generated beverage product preferences to the controller; and

the controller coupled to the communication module and configured to actuate the at least one valve to control an amount of the element to be dispensed and to actuate the mixing chamber based on the user generated beverage product preferences.

'377 patent claim 11 (emphasis added).

## III

RCDI sued Coca-Cola, alleging that Coca-Cola's Free-style dispensers infringe claim 11 and various dependent claims of the '377 patent. The district court construed "user interface module" as "a component of the beverage dispenser that enables direct communication between a user and the dispenser." *Rothschild Connected Devices Innovations, LLC v. Coca-Cola Co.*, No. 16-1241, 2017 WL 5410867, at \*5 (N.D. Ga. Nov. 13, 2017) ("*Markman Opinion*").

RCDI contended that the claim term should be construed as "a component that enables communication between a user and a dispenser." J.A. 458. The district court disagreed. The court noted that, unlike RCDI's proposed construction, the court's construction requires the user interface module to physically be a component of the beverage dispenser." *Id.*

The court explained that "[a] beverage dispenser 'comprising' parts such as a mixing chamber, valves, and a user interface module is most naturally read to physically be made up of these different parts." *Id.* Moreover, the court reasoned, "the components of the system that are not physically part of the dispenser, such as the network and the server, are not described by the claim to be parts that 'comprise' the beverage dispenser. Instead, they are described in relation to the parts that *are* physically comprising the beverage dispenser." *Id.*; *see also Summary Judgment Opinion*, at 1182 n.96 (explaining that "[a] component that is not inside of the casing of the dispenser, but nonetheless sits immediately outside of the dispenser and is connected by tubing—such as the bag-in-a-box carton of high fructose corn syrup—could reasonably be considered a physical component of the apparatus"). RCDI further argued that the word "direct" should not be included in the construction, but the district court disagreed, again noting that the

user interface module must physically be part of the dispenser. *Id.*

Coca-Cola subsequently moved for summary judgment of noninfringement, which the district court granted. *Summary Judgment Opinion*, at 1172. This motion turned on claim 11's limitation that the dispenser comprise "a user interface module configured to receive an[] identity of a user and an identifier of the beverage." In RCDI's view, although a user might not be able to communicate his or her identity and beverage preferences to the dispenser via the Blister touchscreen, the Freestyle dispenser meets the claim limitation because the Blister's controller nevertheless receives that information. More specifically, the user's phone initiates a process in which such information is sent to, among other components, the Blister interface's controller. Therefore, in RCDI's view, the Blister interface is configured to receive that information (albeit not via a user's interaction with the Blister interface itself), which is all that's required by claim 11.

The district court disagreed with RCDI and explained:

The "user interface module" requirement is not satisfied by any component that enables direct communication between the user and the dispenser. Instead, the direct communication must include the user's identity and the beverage identifiers. This is because the claim describes the module as configured to receive an identity of a user and an identifier of the beverage.

*Id.* at 1189. In the district court's view, RCDI's infringement theory—that "a user can communicate with the dispenser via the internet by using the Freestyle app on a cellular phone"—involved indirect communication. *Id.* at 1190. As an initial matter, although "physically touching the [Blister] touchscreen interface is undoubtedly a form of 'direct communication,'" the court concluded that RCDI "has not provided evidence that the Freestyle Dispenser

permits a user to provide his or her identity and beverage identifiers *via the Blister touchscreen.*” *Id.* (emphasis added). Rather, the evidence established only “that a user can use the [Blister] touchscreen to choose a drink from a pre-selected list of beverage options.” *Id.* Furthermore, the district court explained:

The specification describes several ways that a user would directly communicate his or her identity to the user interface module, which is physically part of the dispenser. This identity can be communicated, for example, by an RFID card, on a magnetic swipe card, or by a code that is wirelessly transferred from a cellular phone or mobile device when such a device ‘is *within range* of the dispenser.’ [377 patent col. 7 ll. 31–38 (emphasis added).] It then explains that communications may be in the form of a keyboard, magnetic reader, voice recognition, WiFi communication, RFID communication, Bluetooth, or any other type of communication that may in the future be practiced. However, given the previous descriptions of the user interface module, it becomes clear that these are *direct* communications with the dispenser, and not communications over the Internet, cellular network, or some other network. Thus, a user could use Bluetooth technology to communicate directly with the dispenser, or a local WiFi network to communicate directly with it. However, communications over the cellular network to a server would *not* be direct.

*Id.* at 1192.

Turning to the dependent claims, the court exercised its “inherent authority to manage the affairs of its cases” to “preclude [RCDI] from asserting any of the dependent claims,” due to RCDI’s “consistent refusal to identify the dependent claims that it would assert.” *Id.* at 1178–79.

RCDI appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

On appeal, RCDI argues that the district court erred in granting summary judgment of noninfringement. RCDI contends that the district court erroneously construed the term “a user interface module” and that, under the proper construction, the district court’s grant of summary judgment of noninfringement should be vacated. RCDI also argues that the district court abused its discretion in exercising its “inherent authority to manage the affairs of its cases” to grant Coca-Cola summary judgment of noninfringement as to the asserted dependent claims.

We discuss these issues in turn.

#### I

“The proper construction of a patent’s claims is an issue of Federal Circuit law.” *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1228 (Fed. Cir. 2011). Where, like here, “the district court reviews only evidence intrinsic to the patent (the patent claims and specifications, along with the patent’s prosecution history), the judge’s determination will amount solely to a determination of law,” which we review de novo. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331 (2015).

Claim terms “are generally given their ordinary and customary meaning,” i.e., “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (internal quotation marks and citations omitted). “[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Id.* at 1314. “[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent,

including the specification.” *Id.* at 1313. Although claim terms are interpreted in the context of the entire patent, it is improper to import limitations from the specification into the claims. *Id.* at 1323. “[T]he line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court’s focus remains on understanding how a person of ordinary skill in the art would understand the claim terms.” *Id.*

The district court construed “user interface module” to mean “a component of the beverage dispenser that enables direct communication between a user and the dispenser.” *Markman Opinion*, at \*5. Coca-Cola defends this construction on appeal. RCDI asks us to instead construe the term to mean “a component that enables communication between a user and a dispenser.” We disagree with both constructions and construe “user interface module” to mean “a component the user interacts with to communicate with the dispenser.”

RCDI’s proposed construction reads out the term “interface” in “user interface module.” Indeed, almost any component—for example, a processor, or even a power cord—can in its own way help to *enable* communication between a user and a dispenser. But processors and power cords are not interfaces. Our interpretation gives proper meaning to the term interface by requiring the user interface module to be a component that the user *interacts with* to effectuate communication with the dispenser, not merely a component that enables such communication.<sup>1</sup>

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<sup>1</sup> We note that, in its briefing, RCDI appears to admit that a proper construction of “user interface module” would be “any interface the user interacts with to communicate with the dispenser.” *See* Appellant’s Reply 13–14.



Our claim construction is supported by the specification, which explains that the “user interface module” facilitates “communication between the user and the dispenser” via components the user must interact with to convey information. ’377 patent col. 6 l. 64–col. 7 l. 4; *see also id.* col. 7 ll. 4–7 (explaining that the user interface module “include[s] a display screen” that facilitates interaction with the user by “relay[ing] messages”). Although the specification broadly defines the types of communication technologies the user interface module can exploit, *see, e.g., id.* at col. 7 ll. 43–49, this does not negate the requirement that the user interface module be a component the user interacts with to communicate with the dispenser.

In addition to rejecting RCDI’s proposed construction, we also reject the district court’s claim construction. We address each of the relevant differences between our construction and the district court’s in turn.

#### A

RCDI argues that the district court erred in requiring that the user interface module physically be part of the dispenser. We agree.

Claim 11 recites a beverage dispenser “comprising” a number of components, including “a user interface module.” Claim 11 does not, however, recite *how* the user interface module is connected to the additional components of the dispenser, much less that the user interface module must be physically connected to any or all of these additional components.

As discussed previously, the district court inferred a physical connection between the components “comprising” the claimed dispenser (e.g., the “user interface module,” the “communications module,” and the “mixing chamber”) by comparing those components to the ones that interact with the dispenser (e.g., the “server” and the “network”). But in general, a patent claim reciting an apparatus “comprising”

various components merely means that the apparatus “includ[es] but is not limited to” those components. *See CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007); *see also Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999); *Ga.-Pac. Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1327–28 (Fed. Cir. 1999). Importantly, such language, standing alone, does not generally specify how the claimed components are connected. And in this case, although claim 11 further recites that the beverage dispenser’s communication module communicates with a server over a network, that limitation says nothing about how the dispenser’s “user interface module” connects to the additional components of the beverage dispenser.

Accordingly, the district court erred in concluding that the claimed user interface module must be physically part of the dispenser.

## B

RCDI also contends that, in construing “user interface module” to require enabling *direct* communication between the user and the dispenser, the district court erroneously limited the types of communication technologies that fall under the scope of claim 11. The district court provided little explanation in its *Markman* opinion and order as to the precise meaning of “direct communication” in the adopted construction. *See Markman Opinion*, at \*5. In its Summary Judgment opinion and order, however, the district court made clear that, for user interface modules with touch screens, “physically touching” the touchscreen interface is a form of direct communication. *Summary Judgment Opinion*, at 1189. A user could also use “Bluetooth technology to communicate directly with the dispenser, or a local WiFi network to communicate directly with it.” *Id.* at 1192. However, communications “over a cellular network to the dispenser are [not] ‘direct.’” *Id.* at 1190. In essence, the district court appears to have interpreted

claim 11 to require the user interface module to enable communication between a user and the dispenser via communication technologies that operate at *close* range. *See also id.* at 1192 (highlighting the specification’s statement that the user interface module can enable communications via the user’s mobile device when “such a device ‘is *within range* of the dispenser.’” (quoting ’377 patent col. 7 ll. 31–38 (emphasis added by district court)). Moreover, the district court appears to have further limited the types of permissible communications to those that follow a particular path and sequence. *See, e.g., Summary Judgment Opinion*, at 1191–92.

RCDI argues that these aspects of the district court’s claim construction are erroneous because claim 11 is not limited to communication technologies that operate at short distances or via a particular path. Appellant’s Br. 25. We agree.

Claim 11 recites “a user interface module configured to receive an[] identity of a user and an identifier of the beverage.” Claim 11 does not include any language regarding the permissible communication technologies or paths the user interface module can employ to enable communication between the user and the dispenser, much less any language differentiating between the user’s pressing a touchscreen, transmitting the information over Bluetooth, or transmitting the information over a cellular network. Our interpretation of claim 11 is bolstered by the specification, which broadly states that “[t]he user interface module 416 will enable communications between the user and dispenser via . . . *any . . . type of communication* now known or practiced in the future that will allow the user to identify themselves and/or input information to the beverage dispenser. ’377 patent col. 6 l. 64–col. 7 l. 4 (emphasis added). Accordingly, although the “user interface module” must be a component that a user *interacts with* to communicate with the dispenser, neither the ’377 patent’s claims nor its

specification limit such interaction to specific wireless communication technologies or paths.

### C

RCDI further argues that the district court erred in concluding that the “direct communication between the user and the dispenser . . . must include the user’s identity and the beverage identifiers.” *See Summary Judgment Opinion*, at 1189; Appellant’s Br. 32–36; Appellant’s Reply 2. We agree.

As explained previously, claim 11 does not require the user interface module to enable “direct communication” between the user and the dispenser, at least as defined by the district court. Claim 11 does require that the user be able to interact with the user interface module to communicate with the dispenser. Indeed, the primary purpose of the user interface module is to facilitate the communication of information between the user and the device. *See, e.g.*, ’377 patent col. 6 l. 64–col. 7 l. 4 (“The user interface module 416 will enable communications between the user and dispenser . . .”). Claim 11 merely recites an example of such information. Although user interfaces must invariably be configured to receive information via a user’s interaction with the interface—indeed, that’s what makes a component an *interface* for *users*—here this communication is not restricted in the manner in which it occurs, and may come from various alternative routes, including through other modules. *See, e.g., id.* col. 6 l. 65–col. 7 l. 4 (stating that such communications can be “via . . . any . . . type of communication now known or practiced in the future that will allow the user to identify themselves and/or input information to the beverage dispenser”); *id.* col. 7 ll. 32–37 (“In one embodiment, the identity code may be transferred to the user’s computer where the user may download the code to a mobile device,” which “will wirelessly transfer the code to the user interface module 416 and/or the communication module 414 . . .”). Nor does claim 11 require that such

communication actually occurs. All the claim requires is that the user interface module be “configured to” receive the user and beverage identifiers.

## II

RCDI argues that the district court abused its discretion in exercising its inherent authority to dismiss the case as to the dependent claims. We agree.

The district court’s analysis rests on a faulty premise: that RCDI consistently refused to identify the dependent claims it was asserting. In fact, on March 17, 2016—fewer than five months into the case and before the case was transferred from the Southern District of Florida to the Northern District of Georgia—RCDI disclosed the asserted dependent claims in its proposed amended complaint. J.A. 356; *see also* J.A. 348–58; J.A. 131–44. Although this motion was not ruled on for many months, that delay was through no fault of RCDI. Indeed, on October 2016, after the case was transferred to the Northern District of Georgia, RCDI moved for a new schedule and status conference; in this motion, RCDI notified the court of RCDI’s pending motion to amend the complaint and stated that “the proposed First Amended Complaint . . . specifically identifies the asserted dependent claims of the ’377 patent.” J.A. 725. Subsequently, in response to Coca-Cola’s interrogatory requesting identification of the asserted claims, RCDI referred to its identification of the asserted claims in the proposed amended complaint. J.A. 3920–22. Furthermore, in email correspondence in early 2018, RCDI yet again reiterated that it was only asserting the claims identified in the proposed amended complaint, and further volunteered to “streamline” the case by dropping some of those claims. J.A. 3831. On these facts, we disagree with the district court that RCDI refused to identify the asserted dependent claims, and we conclude that the district court abused its

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discretion in dismissing the case as to the asserted dependent claims on this basis.<sup>2</sup>

#### CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. For the foregoing reasons, we reverse the district court's claim construction of "user interface module," vacate the district court's entry of summary judgment of noninfringement, and remand for further proceedings.<sup>3</sup> RCDI raised a number of discovery-related issues on appeal. On remand, we expect that the district court will hold a new case management conference concerning discovery.

#### **REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED**

#### COSTS

Costs to appellant.

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<sup>2</sup> Coca-Cola argues that any error by the district court is harmless because "RCDI did not provide contentions for its dependent claims," and "[o]n this basis," the district court "would have granted summary judgment of non-infringement for the dependent claims." Appellee's Br. 42. We decline to resolve this dispute in the first instance and leave it for the district court to address on remand.

<sup>3</sup> RCDI contends that, on remand, both the Blister touchscreen and the Freestyle app on a user's phone can each satisfy the "user interface module" limitation. We note that, even under our construction, RCDI's phone app theory might present additional hurdles with regard to infringement. *See, e.g., Centillion Data Sys., LLC v. Qwest Commc'ns Int'l, Inc.*, 631 F.3d 1279, 1286–87 (Fed. Cir. 2011); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1310–11 (Fed. Cir. 2005).