

United States Court of Appeals
for the Federal Circuit

AMERANTH, INC.,
Plaintiff-Appellant

v.

DOMINO'S PIZZA, LLC, DOMINO'S PIZZA, INC.,
Defendants-Appellees

PAPA JOHN'S USA, INC., OPENTABLE, INC., GRUBHUB, INC.,
SEAMLESS NORTH AMERICA, LLC, O-WEB TECHNOLOGIES LTD.,
HOTELS.COM, L.P., STUBHUB, INC., TICKETMASTER, LLC, LIVE
NATION ENTERTAINMENT, INC., TRAVELCITY.COM LP, HOTEL
TONIGHT, INC., ORBITZ, LLC, EXPEDIA, INC., FANDANGO, INC.,
HOTWIRE, INC., KAYAK SOFTWARE CORPORATION, EMN8, INC.,
HILTON INTERNATIONAL CO., HILTON RESORTS CORPORATION,
HILTON WORLDWIDE, INC., USABLENET, INC., STARWOOD HOTELS
& RESORTS WORLDWIDE INC., MOBO SYSTEMS, INC., AGILYSYS,
INC., ATX INNOVATION, INC., BEST WESTERN INTERNATIONAL,
INC., HYATT CORPORATION, ORDR.IN, INC., NAAMA NETWORKS,
INC., MARRIOTT HOTEL SERVICES, INC., MARRIOTT
INTERNATIONAL, INC., RITZ CARLTON HOTEL COMPANY, LLC,
RENAISSANCE HOTEL OPERATING COMPANY, APPLE, INC.,
TICKETBISCUIT, LLC, EVENTBRITE, INC., TICKETFLY, INC.,
STARBUCKS CORPORATION, IPDEV CO., ORACLE CORPORATION,
Defendants

2019-1141

Appeal from the United States District Court for the Southern District of
California in No. 3:11-cv-01810-DMS-WVG, Judge Dana M. Sabraw.

AMERANTH, INC.,

Plaintiff-Appellant

v.

DOMINO'S PIZZA, LLC, DOMINO'S PIZZA, INC.,

Defendants-Appellees

2019-1144

Appeal from the United States District Court for the Southern District of California in No. 3:12-cv-00733-DMS-WVG, Judge Dana M. Sabraw.

**BRIEF OF DEFENDANTS-APPELLEES,
DOMINO'S PIZZA, LLC AND DOMINO'S PIZZA, INC.**

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March 7, 2019

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CERTIFICATE OF INTEREST

Counsel for Defendants-Appellees, Domino's Pizza LLC and Domino's Pizza Inc., certifies the following:

1. The full name of party represented by me: Domino's Pizza LLC
and Domino's Pizza Inc.

2. The name of the real party in interest (please only include any real party in interest NOT identified in Question 3) represented by me is: N/A

3. Parent corporations and publicly held companies that own 10 % or more of stock in the party: Domino's Inc.; Domino's Pizza Inc.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (**and who have not or will not enter an appearance in this case**) are:

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5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. *See* Fed. Cir. R. 47.4(a)(5) and 47.5(b).

- *In re: Ameranth Litig.*, Case No. 3:11-cv-1810 DMS (WVG) (S.D. Cal.);
- *Ameranth, Inc. v. Live Nation Ent., Inc.*, Case No. 3:12-cv-1648-DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Papa John's USA, Inc.*, Case No. 3:12-cv-729 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012);
- *Ameranth, Inc. v. Open Table, Inc.*, Case No. 3:12-cv-731 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012);
- *Ameranth, Inc. v. O-Web Techs. Ltd.*, Case No. 3:12-cv-732 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012);
- *Ameranth, Inc. v. GrubHub, Inc.*, Case No. 3:12-cv-739 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012);
- *Ameranth, Inc. v. Agilysys, Inc.*, Case No. 3:12-cv-858 DMS (WVG) (S.D. Cal., filed Apr. 6, 2012);
- *Ameranth, Inc. v. Hyatt Hotels Corp.*, Case No. 3:12-cv-1627 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Starwood Hotels and Resorts Worldwide, Inc.*, Case No. 3:12-cv-1629 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Best Western International, Inc.*, Case No. 3:12-cv-1630 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Marriott Int'l, Inc.*, Case No. 3:12-cv-1631 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Hotel Tonight, Inc.*, Case No. 3:12-cv-1633 DMS (WVG) (S.D. Cal., filed June 29, 2012);

- *Ameranth, Inc. v. Hotels.com, LP*, Case No. 3:12-cv-1634 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Hilton Resorts Corp.*, Case No. 3:12-cv-1636 DMS (WVG) (S.D. Cal., filed July 2, 2012);
- *Ameranth, Inc. v. Kayak Software Corp.*, Case No. 3:12-cv-1640 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Mobo Systems, Inc.*, Case No. 3:12-cv-1642 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Orbitz, LLC*, Case No. 3:12-cv-1644 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Stubhub, Inc.*, Case No. 3:12-cv-1646 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Ticketmaster, LLC*, Case No. 3:12-cv-1648 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Travelocity.com, LP*, Case No. 3:12-cv-1649 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Usablenet, Inc.*, Case No. 3:12-cv-1650 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Fandango, Inc.*, Case No. 3:12-cv-1651 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Hotwire, Inc.*, Case No. 3:12-cv-1653 MMA (BGS) (S.D. Cal., filed July 2, 2012);
- *Ameranth, Inc. v. Expedia, Inc.*, Case No. 3:12-cv-1654 CAB (RBB) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. Oracle Corp.*, Case No. 3:12-cv-1655 DMS (WVG) (S.D. Cal., filed June 29, 2012);
- *Ameranth, Inc. v. ATX Innovation, Inc.*, Case No. 3:12-cv-1656 JLS DMS (NLS) (S.D. Cal., filed June 29, 2012);

- *Ameranth, Inc. v. Ticketbiscuit, LLC*, Case No. 3:13-cv-352- AJB (KSC) (S.D. Cal., filed Feb. 13, 2013);
- *Ameranth, Inc. v. Starbucks Corp.*, Case No. 3:13-cv-1072 MMA (BGS) (S.D. Cal., filed May 6, 2013);
- *Ameranth Inc. v. Slick-It, Inc.*, Case No. 3:17-cv-1093-DMS (WVG) (S.D. Cal., filed May 26, 2017).

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STATEMENT OF RELATED CASES

There have been no previous appeals before this or any other appellate court arising directly from the civil action giving rise to this appeal. However, in *Apple, Inc. v. Ameranth Inc.*, 842 F.3d 1229 (Fed. Cir. 2016), this Court considered the patent eligibility of claims of patents in the same family, which were also asserted against Appellee in the same civil action giving rise to this appeal. Those claims were presented to this Court as appeals from PTAB decisions on the following Covered Business Method reviews (“CBMs”): 2015-1792, 2015-1793, 2015-1703 and 2015-1704.

Counsel is aware of the following district court cases that involve the same patent that is at issue in this appeal:

Ameranth, Inc. v. Live Nation Ent., Inc., Case No. 3:12-cv-1648-DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Papa John's USA, Inc.*, Case No. 3:12-cv-729 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012); *Ameranth, Inc. v. Open Table, Inc.*, Case No. 3:12-cv-731 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012); *Ameranth, Inc. v. O-Web Techs. Ltd.*, Case No. 3:12-cv-732 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012); *Ameranth, Inc. v. GrubHub, Inc.*, Case No. 3:12-cv-739 DMS (WVG) (S.D. Cal., filed Mar. 27, 2012); *Ameranth, Inc. v. Agilysys, Inc.*, Case No. 3:12-cv-858 H (MDD) (S.D. Cal., filed Apr. 6, 2012); *Ameranth, Inc. v. Hyatt Hotels Corp.*, Case No. 3:12-cv-1627 DMS (WVG) (S.D. Cal., filed June 29, 2012);

Ameranth, Inc v. Starwood Hotels and Resorts Worldwide, Inc., Case No. 3:12-cv-1629 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Best Western International, Inc.*, Case No. 3:12-cv-1630 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Marriott Internat'l, Inc.*, Case No. 3:12-cv-1631 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Hotel Tonight, Inc.*, Case No. 3:12-cv-1633 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Hotels.com, LP*, Case No. 3:12-cv-1634 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Hilton Resorts Corp.*, Case No. 3:12-cv-1636 DMS (WVG) (S.D. Cal., filed July 2, 2012); *Ameranth, Inc. v. Kayak Software Corp.*, Case No. 3:12-cv-1640 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Mobo Systems, Inc.*, Case No. 3:12-cv-1642 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Orbitz, LLC*, Case No. 3:12-cv-1644 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Stubhub, Inc.*, Case No. 3:12-cv-1646 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Ticketmaster, LLC*, Case No. 3:12-cv-1648 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Travelocity.com, LP*, Case No. 3:12-cv-1649 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Usablenet, Inc.*, Case No. 3:12-cv-1650 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Fandango, Inc.*, Case No. 3:12-cv-1651 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Hotwire, Inc.*, Case No. 3:12-cv-1653 MMA (BGS) (S.D. Cal., filed July 2, 2012); *Ameranth, Inc. v.*

Expedia, Inc., Case No. 3:12-cv-1654 CAB (RBB) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Oracle Corp.*, Case No. 3:12-cv-1655 DMS (WVG) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. ATX Innovation, Inc.*, Case No. 3:12-cv-1656 JLS DMS (NLS) (S.D. Cal., filed June 29, 2012); *Ameranth, Inc. v. Ticketbiscuit, LLC*, Case No. 3:13-cv-352- AJB (KSC) (S.D. Cal., filed Feb. 13, 2013); *Ameranth, Inc. v. Starbucks Corp.*, Case No. 3:13-cv-1072 MMA (BGS)(S.D. Cal., filed May 6, 2013); *Ameranth Inc. v. Spluck-It, Inc.*, Case No. 3:17-cv-1093-DMS (WVG) (S.D. Cal., filed May 26, 2017); *In re: Ameranth Litig.*, Case No. 3:11-cv-1810 DMS (WVG) (S.D. Cal.).

STATEMENT OF THE ISSUES

1. Whether the district court correctly found that claims 1, 4-9, 11 and 13-18 of U.S. Patent No. 8,146,077 (“the ’077 patent”) are patent-ineligible under 35 U.S.C. §101.

2. Whether the district court had subject matter jurisdiction over claims 4-5, 7, 11, 14-16 and 18 of the ’077 patent when it found them patent-ineligible under 35 U.S.C. §101.

STATEMENT OF THE CASE

A. The '077 Patent Family

The '077 patent belongs to a family of patents directed to configuring and transmitting hospitality menus (e.g., restaurant menus) for display on electronic devices, and synchronizing the menu content between the devices. Other patents in the family include U.S. Patent Nos. 6,384,850 (“the '850 patent”), 6,982,733 (“the '733 patent”) and 6,871,325 (“the '325 patent”). The '077 specification is identical to the '733 specification, and “largely the same as” the common specification of the '325 and '850 patents. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1234 n.1 (Fed. Cir. 2016); *see also* Appx6427-6446 (highlighting specification differences).

1. The '077 claims focus on the abstract idea of formatting for display, and synchronizing, menu information on different sized displays

Configuring and formatting menu information for different-sized displays, and transmitting and synchronizing the menu information on these displays, are functions as old as the restaurant industry. *See* Appx6514, Appx6544-6545. For example, restaurants have long created menus and shown them on various sized displays, e.g., wall chalkboards and a multi-page paper menu. *Id.* As the '077 patent specification acknowledges, this was traditionally done manually. Appx288 at 1:32-34 (“pen and paper have prevailed in the hospitality industry, e.g., for restaurant ordering”). If menu content changed, the menus would be made consistent (i.e., synchronized) by removing/adding items on the various displays. Similarly, when

a customer ordered from the menu, a waiter would record the order by hand and transmit it to the kitchen. *Id.* at 1:36-40 (“ordering prepared foods has historically been done verbally ... where upon the placed order is recorded on paper ...”).

2. The '077 patent admittedly uses “typical hardware elements” and “commonly known” programming steps to generate “computerized menus for restaurants”

Like the related claims in the family, the '077 claims relate to computerizing the well-known idea of creating menus for different displays (e.g., paper menus, wall chalkboards and other non-electronic menu boards), presenting those menus to customers, and synchronizing the menu content when necessary. The '077 specification notes that “[w]hile computers have dramatically altered many aspects of modern life, pen and paper have prevailed in the hospitality industry.” Appx288 at 1:32-36. Wireless handheld devices, including laptop computers, were “common” at the time of the invention (*id.* at 1:41-45) and their use was “ubiquitous ... in some areas (e.g. personal calendars),” but “substantial use in the restaurant and hospitality context had not yet occurred.” *Id.* at 2:4-12. Accordingly, “a principal object” of the purported invention was to provide a system that “facilitates user-friendly and efficient generation of computerized menus for restaurants.” *Id.* at 2:61-67.

Although the '077 patent describes various embodiments for generating and transmitting restaurant menus, each is implemented using “conventional” computer systems including “typical hardware elements”:

The preferred embodiment of the present invention uses typical hardware elements in the form of a computer workstation, operating system and application software elements which configure the hardware elements for operation in accordance with the present invention. ... The workstation hardware is configured by software including an operating system, e.g., Windows® 95, 98, NT or CE, networking software (including internet browsing software) and application software components.

Appx290-291 at 6:54-7:1.

The purported invention is implemented using conventional and well-known software techniques, i.e.: “[t]he software applications for performing the functions falling within the [scope of the claims] can be written in any commonly used computer language,” and “[t]he discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention.” Appx293 at 12:57-61. The specification also states that the invention uses “common GUI operating systems” such as Microsoft Windows on personal computers and Windows CE on handheld devices. Appx290 at 6:12-27. In this regard, the specification states that these “operating system[s] ... provide[] a graphical user interface (‘GUI’) for accessing user applications.” *Id.* at 6:12-14. These operating systems included “built-in synchronization.” Appx293 at 12:12-19 (“[T]he present invention uses Windows CE® as the operating system for the handheld devices. Windows CE® provides the benefits of a familiar Windows 95/98/NT® look and feel, built-in synchronization between handheld devices, internet and desktop infrastructure, compatibility with Microsoft Exchange®,

Microsoft Office 9® and TCP/IP quick access to information with instant-on feature”).

Although the ’077 patent is described entirely in the restaurant menu context, the specification broadly purports to “encompass[] the generation of a menu in any context known to those of skill in the art where an objective is to facilitate display of the menu so as to enable selection of items from that menu.” Appx295 at 15:25-32. As the instant case caption reflects, Ameranth has applied it broadly, suing 38 companies for infringement of the ’077 patent in varied industry sectors far afield from restaurant menus, including handheld device manufacturer Apple and ticket provider Fandango.

3. Ameranth focuses on the “programmable handheld [menu] configuration” and “real time synchronous” limitations of the ’077 claims

Independent claims 1, 9, and 13 (and hence all ’077 claims) require among other things a master menu/database and at least two different wireless handheld computing devices. Appx295-297 at 15:64-66 and 16:50-57 (claim 1), 17:45-47 and 18:36-43 (claim 9), 19:1-3 and 20:5-9 (claim 13). In addition, all claims require two features on which Ameranth repeatedly relies.

First, all claims require a “programmable handheld [menu] configuration” (“PHMC”) formatted as “cascaded sets of linked graphical user interface [GUI]

screens” for the “two different” devices, with a “different number” of GUI screens for the different devices. More specifically, all claims require a system/software:

further enabled to automatically format the *programmed handheld [menu]¹ configuration* for display as *cascaded sets of linked graphical user interface screens* appropriate for a customized display layout of at least *two different wireless handheld computing device display sizes* in the same connected system, and

wherein a cascaded set of linked graphical user interface screens for a wireless handheld computing device in the system includes a *different number of user interface screens* from at least one other wireless handheld computing device in the system.

Appx295-297 at 16:50-61 (claim 1), 18:36-48 (claim 9), 19:39-20:9 (claim 13) (emphasis added).

Throughout this brief, Domino’s will reference these limitations as the “PHMC” limitations or “cascaded sets”/“different number” of GUI screens limitations.

Second, the claims require “real time synchronous” communication between a wireless handheld device and other system components. For example, claims 1 and 9 require:

wherein the system is enabled for *real time synchronous* communications to and from the wireless handheld computing device

¹ While claims 1 and 9 include the word “menu”, and claim 13 does not, the difference has no impact here. As Ameranth admits, the programmed handheld configuration (“PHC”) of claim 13 is “equivalent” to the PHMC in claims 1 and 9. Appx 354, Appx3615, n.34 (“The term [PHC] excluded ‘menu’ as to claim 13, but clearly has the same meaning as [PHMC] in claims 1 and 9, as is clear from claim 13 as a whole ...”).

utilizing the programmed handheld menu configuration including the capability of *real time synchronous* transmission of the programmed handheld menu configuration to the wireless handheld computing device and *real time synchronous* transmissions of selections made from the handheld menu configuration on the wireless handheld computing device, and

Appx295-296 at 16:41-49 (claim 1), 18:25-35 (claim 9) (emphasis added).

Similarly, claim 13 requires:

wherein the system is enabled for *real time synchronous* transmission of the configured hospitality application information to the wireless handheld computing device, the web server and the web page and *real time synchronous* transmissions of inputs responding to the configured hospitality application information from the wireless handheld computing device, or the web server or the web page.

Appx297 at 20:10-17 (emphasis added); see also *id.* at 19:15-25 (“synchronize the hospitality application information in real time ...”).

Domino’s will reference these limitations as the “real time synchronous” limitations.

B. The District Court and CBM-Related Proceedings

1. The pleadings and contentions

Between 2011 and 2013, Ameranth filed three suits against Domino’s (and numerous other defendants) asserting the ’850 and ’325, ’733, and ’077 patents. The district court consolidated the three actions and ordered Ameranth to file a consolidated complaint. Appx337-367. Ameranth’s consolidated complaint included infringement contentions asserting claims 1, 3, 6-9, 11-13 and 15-18 of the ’077 patent. Appx12425-12426. Domino’s answered, asserting both an affirmative

defense and a declaratory judgment counterclaim requesting a finding that “[t]he claims of the Patents-in-Suit are invalid for failure to satisfy the requirements of 35 U.S.C. §101.” Appx443-490 at ¶¶127-132, ¶¶145-146.

2. This Court held challenged claims of three other patents in the ’077 family unpatentable under §101

Domino’s and others accused of infringing the ’077 patent family filed petitions for Covered Business Method (“CBM”) review of the ’850, ’325 and ’733 patents. The Patent Trial and Appeal Board (“PTAB”) instituted review and the district court stayed the case while the CBMs and appeals were pending.

During the CBMs, Ameranth submitted, as evidence of non-obviousness and unconventionality, the declarations it had submitted during prosecution of the ’077 patent. *See, e.g.*, Appx12820-12835. The PTAB then found certain claims of each of the patents unpatentable under §101. *Apple*, 842 F.3d at 1235-36.

On appeal, this Court affirmed the PTAB’s rulings finding certain claims unpatentable and reversed its determinations finding patentability of other claims.²

² Domino’s and others also petitioned for CBM review of the ’077 patent. Because the PTAB declined those petitions, Domino’s could not appeal to this Court. 35 U.S.C. §324(e). Regardless, as explained in the underlying Motion for Summary Judgment (Appx6402-6403), those decisions are immaterial to this appeal. Neither applied *Alice*’s two-step analysis, nor expressly considered whether the claims are directed to well-understood, routine, or conventional activities. Appx12668-12728, Appx2166-2187. And in CBM2017-00053, the PTAB denied review on procedural grounds, never considering the merits, because it found the petition presented substantially the same arguments as previously presented. Appx2187.

Apple, 842 F.3d at 1245. Specifically, applying the Supreme Court’s two-step analysis set forth in *Alice Corp. v. CLS Bank, Int’l*, 573 U.S. 208, 134 S.Ct. 2347 (2014), the Court found all instituted claims of the ’850, ’325 and ’733 patents ineligible for patent protection under §101. *Apple*, 842 F.3d at 1245.

3. The summary judgment briefing

After the CBMs concluded, the district court lifted the stay, divided the defendants into industry groups and issued a scheduling order for each group. The district court placed Domino’s, Pizza Hut and its supplier QuickOrder, and Papa John’s in the “Pizza Defendants Group” and scheduled them for the first trials.

In June 2018, the district court limited each “pizza” defendant to a single summary judgment motion. Appx10211-10212. Domino’s moved for summary judgment of non-infringement. *Id.* Pizza Hut moved for summary judgment that *all* claims of the ’077 patent were unpatentable under §101.

The ’077 patent is unpatentable under Section 101 for the same reasons set forth by the Federal Circuit in rendering unpatentable three other patents in this family. ... *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016). Based on the same analysis utilized by the Federal Circuit, which Ameranth did not appeal, the claims of the ’077 patent are likewise unpatentable.

Appx6395, Appx6398.

Pizza Hut argued that the “the concept of configuring and transmitting such hospitality information is an abstract idea that was well-known and regularly utilized, most commonly through the use of pen and paper.” Appx6398-6400. Pizza

Hut pointed out that “neither the claims nor the specification specifies a unique or precise manner for configuring or transmitting such information” and that the ’077 patent teaches the alleged invention is implemented utilizing “typical hardware elements” and “commonly known” software programming. Appx6406-6421.

In its opposition brief, Ameranth asserted that ’077 “claims 1-18” were patentable (Appx7162) and argued this Court’s *Apple* decision was inapplicable to the ’077 claims because all “include systemic ‘synchronization.’” Appx7155.

Ameranth addressed the ’077 dependent claims collectively, regardless of whether asserted against Pizza Hut.

For example, the ‘central processing unit’ of *claims 1-12* (discussed above) and ‘master database’ of *claims 13-18* are not generic databases, they are specially purposed for providing the claimed synchronization functionality, and thus do not preempt all uses of databases in computerizing menus.

See, e.g., Appx7172, n.28 (emphasis added). Ameranth addressed independent claim 9, which was ***not asserted*** against Pizza Hut, seven times. Appx7156 (twice); Appx7161 (n.5); Appx7165 (n.18); Appx7169-7170; Appx7172 (n.28).

In August 2018, Ameranth and Pizza Hut settled. Domino’s asked the district court if it could step into Pizza Hut’s shoes on its summary judgment motion, which had not been decided, because of Ameranth’s allegations against “more than thirty separate Defendants” who were “continuing to defend against allegations of infringement of a patent that may or may not satisfy the requirements of §101.”

Appx10228-10229. The district court granted Domino's request and allowed Ameranth to file a 25-page supplemental opposition to address additional claims. Appx10229.

Ameranth's supplemental opposition requested not only denial of the motion, but also that the district court find "as a matter of law" that "*the claims of the '077 patent*" are patentable under §101. Appx10235 (emphasis added); *see also*, Appx10259. Also, throughout its supplementation, Ameranth repeatedly addressed the patentability of all '077 claims. Appx10237-10240, Appx10244. Ameranth argued those claims are patentable because "they have additional functionality and elements that render them non-conventional and patent-eligible ... such as POS importation, multiple hospitality application integration, and 'communications systemic relationship' interactivity." Appx10258-10259.

4. The district court's summary judgment opinion

In September 2018, the district court granted Domino's motion for summary judgment. Appx3. After noting that Ameranth had "retreated from its position that the invention is in the software, and is now explaining the claims by reference to the problem allegedly being solved ..." (Appx10), the district court characterized the claims as follows:

On their face, the claims are directed to a system for (1) configuring and transmitting hospitality information from a master menu/database to wireless handheld devices with different display screen sizes and (2)

enabling real-time synchronous communications and formatting between the wireless handheld devices and the master database.

Id.

Under *Alice* step one, the district court found that “the claims here, like those in the related patents, ‘do not claim a particular way of programming or designing the software to create menus that have these features, but instead merely claim the resulting systems.’” Appx11. The district court further noted that, although “the claims of the ’077 patent include functionality in addition to the generation and transmission of menus,” that “does not change the nature of the underlying invention, which is ‘directed to an abstract idea.’” Appx12 (quoting *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1344-45 (Fed. Cir. 2018)).

Under *Alice* step two, the district court analyzed the limitations claimed by Ameranth to confer patentability, and the evidence before it, and found that each was directed to “typical and conventional” hardware elements, “commonly known” software elements, and/or “insignificant post-solution activity.” Appx13-15. The district court further found that “as with the related patents, there is nothing in these elements, either individually or in combination that ‘transform[s] the claimed abstract idea into a patent-eligible application of the abstract idea.’” Appx15 (quoting *Apple*, 842 F.3d at 1242).

The district court thus concluded that '077 claims 1, 4-9, 11 and 13-18 are invalid for lack of patent eligibility under §101. Appx15. After entry of judgment, Appx1-2, this appeal followed.

SUMMARY OF THE ARGUMENT

The district court correctly applied this Court's *Apple* precedent and other precedent, and correctly concluded that the '077 claims fail both steps of the *Alice* test. The district court therefore correctly held the '077 claims unpatentable under §101.

Ameranth first argues that the district court erred in relying on this Court's *Apple* decision. On the contrary, the *Apple* decision is highly relevant, if not the most relevant precedent of this Court, because *Apple* addressed the patent eligibility of similar claims, in patents with similar or identical specifications, to the claims and specifications in the '077 patent. The district court correctly looked to this Court's analysis and methodology in *Apple*, and correctly applied that methodology.

Ameranth wrongly accuses the district court of failing to consider, in its *Alice* step one analysis, the “real time synchronous” limitations and the “PHMC”/“cascaded sets”/“different number” of GUI screens limitations. In fact, the district court considered these limitations and correctly concluded they do not make the claims less abstract because they merely claim menu *features*. As the district court stated, “although these claims include additional limitations [than the

related '850, '325 and '733 patent-ineligible claims], the limitations ‘do not claim a particular way of programming or designing the software to create menus that have these features,’” but instead merely claim the resulting systems. Appx11. Thus, the district court performed the proper step one analysis.

Under *Alice* step two, the district court correctly concluded that nothing in the claims, either individually or in an ordered combination, provide an inventive concept sufficient to confer patent eligibility. The district court relied heavily on the inventors’ own statements in the specification that the hardware elements were “typical and conventional” and the software elements were “commonly known.” The claims do not provide “specific programming, tailored software, or meaningful guidance for implementing the abstract concept.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1334 (Fed. Cir. 2017).

Ameranth wrongly argues that the district court should have relied on evidence of accolades and expert testimony presented by Ameranth that the hardware and software elements were not “conventional or “commonly known.” Purported “evidence” of accolades does not make claims any less abstract if the claims merely “used generic functional language to achieve these purported solutions,” without “any requirements for how the desired result is achieved.” *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017). Moreover, the asserted “accolades” had no nexus to the claimed

invention. Additionally, the district court was free to ignore conclusory, after-the-fact expert testimony that contradicted the patent's specification.

Finally, Ameranth incorrectly argues the district court erred by treating claim 1 as representative and by finding claims not asserted against Domino's patent ineligible. First, the district court did not treat claim 1 as representative as evidenced by its consideration of all the claims. In any event, there are no differences between claim 1 and the other claims that would render those claims patent eligible. Second, under both the Federal Rules and this Court's recent decisions, the district court properly found claims not specifically asserted against Domino's to be patent ineligible because: (1) Domino's asserted an affirmative defense and counterclaim seeking patent ineligibility of all the '077 claims, (2) Domino's summary judgment motion sought ineligibility of all the '077 claims, (3) the district court put Ameranth on notice that the motion concerned claims asserted against all defendants, and (4) Ameranth's briefing addressed all the claims and requested that "all" be declared patent-eligible.

The judgment below is correct and should be affirmed.

ARGUMENT

A. *Alice*'s Two-Step Patent Eligibility Framework Under §101

In *Alice*, the Supreme Court described the §101 patent-eligibility analysis as a question of law and set out a two-part test. 573 U.S. at 217-18. In the first step, the court must “determine whether the claims at issue are directed to one of those patent ineligible concepts.” *Id.* In the second step, the court must ask “[w]hat else is there in the claims before us’ ... to determine whether additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 77-78 (2012)). The *Alice* Court described that second step “as a search for an ‘inventive concept’” that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (quoting *Mayo*, 566 U.S. at 72-73).

The court must ensure that the claims do not “disproportionately t[ie] up the use of the underlying [ineligible concepts],” *id.* at 217 (quoting *Mayo*, 566 U.S. at 73), and “must distinguish between patents that claim the ‘building block[s]’ of human ingenuity and those that integrate the building blocks into something more.” *Id.* (citing *Mayo*, 566 U.S. at 89).

As detailed below, the district court correctly found the '077 claims are directed to an abstract idea, contain nothing that constitutes an inventive concept, and therefore are not patent eligible under §101.

B. The District Court Properly Considered This Court's *Apple* Decision, the Most Relevant Precedent to This Case

Contrary to Ameranth's assertion (Blue Br. 25-29), this Court's *Apple* decision is highly relevant because *Apple* addresses three related patents with similar claimed subject matter and specifications that are "largely the same as" the '077 patent. Appx6427- 6448; *Apple*, 842 F.3d at 1234, n.1. The patents addressed in *Apple* "claim systems including menus with particular features." 842 F.3d at 1241. The '077 patent likewise claims systems including menus with certain features, e.g., the "PHMC" with "cascaded sets"/"different numbers" of GUI screens. The '733 patent addressed in *Apple* claimed "synchronization." *Id.* at 1241-42. Likewise, the '077 claims have "real time synchronous" limitations. (See Section A.3 in Statement of the Case.) Finally, the '077 and '733 specifications are identical and "largely the same as" the common '325 and '850 specifications. See *Apple*, 842 F.3d at 1234 n.1; see also Appx6427-6448.

Ameranth tries to distinguish *Apple* here by referencing the "real time synchronous" and "PHMC" features of the claims. Blue Br. 26-27. Because Ameranth repeats these arguments in both its step one and step two sections, Domino's addresses them below, and explains why they do not impact the analysis

under *Apple*. Regardless, even if Ameranth could show differences between the '077 claims and the claims at issue in *Apple*, that does not change the fact that *Apple* is at a minimum close precedent and therefore important in a proper analysis.

The district properly relied on *Apple* in finding the '077 claims to be patent-ineligible under §101.

C. The District Court Properly Concluded That the '077 Claims Are Directed to Unpatentable Subject Matter

1. The district court correctly concluded that the '077 claims fail step one because they merely claim menus with certain features

The district court carefully and correctly applied this Court's precedent in *Alice* and *Apple* to conclude under *Alice* step one that the '077 claims are directed to the abstract idea of:

On their face, the claims are directed to a system for (1) configuring and transmitting hospitality information from a master menu/database to wireless handheld devices with different display screen sizes and (2) enabling real-time synchronous communications and formatting between the wireless handheld devices and the master database.

Appx10.

In addressing *Alice* step one, the *Apple* Court distinguished (1) claiming “*menus with particular features*” from (2) claiming “**a particular way of programming or designing the software to create [those] menus**” or “**a specific improvement in the way computers operate,**” *i.e.*:

The patents claim systems including menus with particular features. They do not claim a particular way of programming or designing the software to create menus that have these features, but instead merely claim the resulting systems. Essentially, the claims are directed to certain functionality—here, the ability to generate menus with certain features. ... Alternatively the claims are not directed to a specific improvement in the way computers operate.

Apple, 842 F.3d at 1241 (emphasis added; citations omitted). Because the Ameranth patents at issue in *Apple* claimed the menu “features” rather than “particular ... programming” for those features, or an “improvement in the way computers operate,” those claims were abstract. *Id.*

The district court applied *Apple*’s “features” versus “programming”/“way computers operate” distinction, and held the ’077 claims, “like those in the related patents,” fail *Alice* step one because the ’077 claims “merely claim the resulting systems,” “do not claim a particular way of programming or designing the software to create menus that have these features,” and “are not directed to improving the capabilities of any particular computing device.” Appx10-11 (quoting *Apple*, 842 F.3d at 1241).

Ameranth challenges the district court’s “step one” analysis by arguing the court failed to analyze certain claim limitations. Blue Br. 34-38. Specifically, Ameranth argues the court should have considered additional limitations relating to “synchronizing in real time” and formatting a PHMC, which Ameranth contends confer patent eligibility.

But this Court has held that at step one, courts look to the claims’ “basic thrust,” “focus,” or “character as a whole,” not particular claim limitations. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) and *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). Claim limitations can “add a degree of particularity.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). Yet, a claim is still directed to an abstract idea where “the concept embodied by the majority of the limitations” recites an abstraction. *Id.*

As explained in the following sections, all the limitations on which Ameranth relies “merely claim the resulting systems.” *Apple*, 842 F.3d at 1241. Thus, these limitations do not take the claims out of the realm of abstract ideas, and indeed could not, because the specification concedes that the purported invention is implemented using “typical hardware elements” in combination with “commonly known” programming steps. Appx290 at 6:12-67; Appx291 at 7:1-30, Appx293 at 12:12-19; 12:57–62; *see also supra* at Section A.2 in Statement of the Case.

2. The ’077 patent does not claim “a particular way of programming or designing” software

Although Ameranth argues that the ’077 claims do “teach a particular way of programming and designing the software” (Blue Br. 26), Ameranth points only to the “real time synchronous” *menu features* and the “PHMC” *menu features*.

However, the cited claim language does not describe any programming, let alone “a particular way of **programming** or **designing software**” for “synchroniz[ing] in real-time” or creating the claimed “PHMC.” *Apple, Inc.*, 842 F.3d at 1241 (emphasis added).

This Court has observed “the essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under §101, especially in the area of using generic computer and network technology to carry out economic transactions.” *Elec. Power Grp.*, 830 F.3d at 1356; *Apple*, 842 F.3d at 1244; *Univ. of Florida Res. Found., Inc. v. General Elec. Co.*, ___F.3d___, 2019 U.S. App. LEXIS 5568 at *11-12 (Fed. Cir. Feb. 26, 2019)(finding claims abstract that “fail[] to provide any technical details for the tangible components, ... instead predominately describ[ing] the system and methods in purely functional terms”) (quoting *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016)); *see also Affinity Labs of Tex., LLC v. Amazon.com, Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) (claims reciting function of streaming content to wireless device, but no specific means for performing that function, are abstract). As established below, the “real time synchronous” limitations and the “PHMC” limitations merely claim generic, result-focused menu features, achieved by conventional computer hardware and software. These limitations do not distinguish the ’077 claims from the claims

held unpatentable in *Apple* because here, as in *Apple*, the patents merely claim “systems including menus with particular features.” *Apple*, 842 F.3d at 1241.

a. “synchroniz[ing] in “real-time” is a functional feature/result, not “a particular way of programming or designing the software”

On pages 33-34, Ameranth quotes two clauses from claim 13 relating to “synchroniz[ing]” in “real-time.” These clauses claim “communications control software enabled to”:

- “utilize parameters from the master database file structure to *synchronize* the hospitality application information in *real time* between the master database, at least one wireless handheld computing device, at least one web server and at least one web page,”
- “act as a *real time* interface between the elements of the system and any applicable communications protocol,”

Blue Br. 33-34 (quoting Appx297 at 19:15-19:30) (emphasis added).

These limitations claim a *menu feature* or *result* that does not remove the claim from abstractness. Moreover, the claims nowhere describe what “parameters from the master database file structure” are “utilized” or *how* they are utilized to “synchronize ... in real time,” let alone *how* to synchronize such that the same information appears on the “master database,” “at least one wireless handheld computing device,” “a web server,” and a “web page.” Indeed, only two short paragraphs in the specification discuss the communications control software that performs these “real time synchronous” functions. Neither mentions “parameters

from the master database file structure” and only one discusses synchronization, but again only in a general, results-based manner:

The synchronous communications control module discussed above provides a single point of entry for all hospitality applications to communicate with one another wirelessly or over the Web. ... The single point of entry works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database) so that the so different components are in equilibrium at any given time and an overall consistency is achieved.

Appx293 at 12:39-51. The specification provides no details because, as the *Apple* Court found, the specification states “the Windows CE® operating system included ‘built in synchronization between handheld devices, internet and desktop infrastructure.’” 842 F.3d at 1242 (quoting the ’733 patent).

Likewise, nothing in the claims provides any detail as to *how* the communications control software acts as a “real time interface” or how it works with “*any* applicable communications protocol.” Appx297 at 19:27-29 (emphasis added). The specification merely states that the “communications control software” monitors and receives communications, decodes them, and routes them to the appropriate device. Appx292 at 10:42-49. The claims do not describe how it works to achieve the claimed result. See *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1331 (Fed. Cir. 2017) (finding claims abstract that “[n]owhere ... recite elements or components that describe how the invention overcomes these compatibility issues”).

Ameranth incorrectly asserts that the “communications control software” improves the computer system by allowing the claimed hospitality system to work with new and varying communications protocols without modifying the hospitality application, thereby solving a prior art problem. Blue Br. 34-35. In fact, the claims nowhere explain any “particular way of programming or designing” software that “allow[s] the claimed hospitality system to work with new and varying communications protocols without modifying the hospitality application.” *Id.*; *Apple*, 842 F.3d at 1241. Indeed, there is nothing in the patent that recites anything other than conventional, generic computer components performing “commonly known” “programming steps,” let alone how such software improves existing software. Appx293 at 12:57-61.

b. Generating/formatting a “PHMC” as a “customized display layout” with “cascaded sets of [GUI] screens” is a functional feature/result, not “a particular way of programming or designing the software”

Ameranth also quotes the following limitations pertaining to configuring and formatting the PHMC:

[From claims 1 and 9]

- “generate a programmed handheld menu configuration from said master menu” “for display on a wireless handheld computing device, said programmed handheld menu configuration comprising at least menu categories, menu items and modifier”,
- “generate said programmed handheld menu configuration by utilizing parameters from the master menu file structure”, and

- “generate *the programmed handheld menu configuration* in conformity with a *customized display layout unique to the wireless handheld computing device* to facilitate user operations with and display of the programmed handheld menu configuration on the display screen of a handheld graphical user interface integral with the wireless handheld computing device, wherein said customized display layout is compatible with the displayable size of the handheld graphical user interface.”

Blue Br. 36-37 (quoting Appx295-296 at 16:5-34, 17:53-18:12 (emphasis added)).

[From claim 13]

- “*automatically and simultaneously configure the hospitality application information for display* on both the wireless handheld computing device and the web page in conformity with a *customized display layout unique to the wireless handheld computing device* or the *web page*, wherein said customized display layout is compatible with the displayable size of the handheld computing device display screen or the web page,” and
- “*automatically format a programmed handheld configuration for display* as cascaded sets of linked graphical user interface screens appropriate for a *customized display layout of at least two different wireless handheld computing device display sizes* in the same connected system;”

Blue Br. 34 (quoting Appx297 at 19:31-20:9 (emphasis added)).

Like the limitations addressed in *Apple*, the above-quoted limitations again are all “result focused” and do “not claim a particular way of programming or designing the software” to perform the recited functions. 842 F.3d at 1241. For example, just like the claims in *Apple* required generating a second menu from a first menu, these claims require generating a PHMC from a master menu. Appx12580-12584; *see also* Appx12610-12616, Appx12647-12653. Just like the

claims at issue in *Apple*, the claims here require that the menu comprise menu categories, menu items and modifiers. *Id.* The claims further require that the PHMC be generated utilizing “parameters from the master menu file structure,” but say nothing about *what* these unspecified parameters are, or *how* they must be used to generate a PHMC.³

Although the claims require that the PHMC have a “customized display layout” that is “unique to the wireless handheld computing device,” the claims nowhere explain *how* this is done. Ameranth asserts now that the claimed “menu configuration tak[es] into account the known size of the handheld display,” Blue Br. 13 (citing Appx1074), but the ’077 patent nowhere explains how the claimed software takes into account the “known size of the handheld” to create a “customized display layout” that is “unique” to each handheld device. In addition, Ameranth’s current assertions that these specifics are claimed contradicts its infringement position. Ameranth asserted that both Domino’s and Papa John’s accused systems infringe independent claims 1, 9 and 13 – even though Ameranth’s expert admitted that the alleged PHMC’s in these systems had no knowledge of the display size, or

³ The ’850, ’325 and ’733 claims found patent-ineligible in *Apple* similarly required software that “facilitates the generation of the second menu by ... assignment of parameters to items in the second menu.” Appx12583-12584, Appx12613-12616, Appx12651-12653, respectively.

any other characteristics, of any of the handheld devices. Appx4924-4928 at Appx4927 (citing Appx5781, ll.11-18); Appx6063-6064 (citing Appx6235).

Similarly, regarding claim 13, Ameranth can point to nothing in the claims that describes how the claimed software “automatically and simultaneously configure[s] the hospitality application information” for a “customized display layout unique to the wireless handheld computing device.” Nor can it point to any description of how it “automatically format[s] a [PHMC] for display ... for a customized display layout,” let alone how to “format a [PHMC]” to display differently (having a different number of GUI screens) on at least two handheld devices with “different ... display sizes.” This Court has held that automating processes on a computer, such as customizing a menu for display, does not make them patentable subject matter. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014).

Ameranth further asserts that “claims 1, 9 and 13 recite the additional limitation of ‘a cascaded set of linked [GUI] screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system.’” Blue Br. 37 (quoting Appx295-297 at 16:57-61, 18:43-47, 20:5-9). However, none of the layout customization described in the patent discusses the number of user interface screens, nor whether these screens are “linked” and/or “cascading,” as stated in the

claims. Indeed, the only customization discussed in the specification is done *manually*, not “automatically,” by a user who can “click,” “select[],” and “drag-and-drop.” *See generally*, Appx292-293 at 10:20-42, 10:61-11:14. Moreover, the customization discussed pertains to the columns to display, their width and justification, fields to display, the type, style and size of fonts and the size of the windows. *Id.* Other than functionally describing the resulting system, no detail is provided about how to format the cascading or linking of GUI screens for display – other than conventional, generic computer components performing “commonly known ... programming.” *Id.* at 12:49-51. *Affinity*, 838 F.3d at 1271-1272 (finding a “customized user interface” abstract when there was no description *in the claims* of how customization was accomplished).

In short, the district court correctly concluded that the ’077 claims do “not claim a particular way of programming or designing the software to create menus that have these features, but instead merely claim the resulting systems.” Appx11.

3. The ’077 claims do not cover any improvements to the functionality of computers

The district court also properly concluded that “the claims of the ’077 patent are not directed to improving the capabilities of any particular computing device.” Appx12. Courts distinguish claims that focus on “specific means ... that improve[] the relevant technology” from claims “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v.*

Bandai Namco Games Am. Inc., 837 F.3d 1299, 1314 (Fed. Cir. 2016). Put differently, the claims must improve “the way [the] computer functions.” *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1320 (Fed. Cir. 2016) (“*Symantec*”).

As the district court noted, critical admissions in the specification foreclose any assertion of improvement to computer functions. *Id.* First, the ’077 specification admits that the “hardware elements” of the invention are “typical” and “conventional.” Appx290-291 at 6:54-7:09. Next, it admits that the graphical user interface (“GUI technology”) used in the invention was common, that the “use of menus [was] conventional in GUIs for software applications,” and commonly displayed as “cascaded sets of menus displayable in context to show the parent/child relationships.” Appx290-292 at 6:12-37, 7:10-19, 10:61-63. Finally, it admits that “[t]he discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention.” Appx293 at 12:57-61.

Ameranth incorrectly asserts that the claims detail many improvements to computer technology. These are not improvements; the claims merely use generic computing technology and software as tools to achieve the claimed results. *Ultramercial*, 772 F.3d at 717 (“[a]ny transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the [patent-eligibility] analysis”).

First, Ameranth asserts throughout its brief that the claimed invention improved the user interface for different sized small screens by creating a customized display layout with cascaded screens which purportedly “obviated the need to have separate, individualized programming for each device” and “solved the problem of having to scroll through information in its entirety due to the prior art’s inability to customize the format/layout for the size of the handheld devices’ small screens.” Blue Br. 5, 17, 22-23, 28-29, 31, 35, 42-44.

Ameranth’s improved user interface assertions are without merit. As discussed above, “[t]he mere function of [configuring/formatting] is not a ‘specific improvement to the way computers operate.’” *Univ. of Florida*, 2019 U.S. App. LEXIS 5568 at *11 (quoting *Enfish*, 822 F.3d at 1336). Moreover, as the district court properly found, the claimed “customized display layouts” are created by the claimed “menu configuration software” and “communications control software,” for which Ameranth admits the “programming steps are commonly known.” Appx14 (citing Appx293 at 12:57-61).

Further, the purported no scrolling improvement is not claimed. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018) (alleged improvements to computer functionality must be claimed). Critically, during claim construction, Ameranth opposed a defendant’s argument for construction of “customized display layout” that attempted to introduce a “no scrolling” limitation, arguing: “[t]here is nothing in the

claims about ‘scrolling’ or any preclusion of ‘scrolling.’” Appx2286, ll.13-14.⁴ Thus, Ameranth successfully argued in the district court that the purported no scrolling improvement was not captured by the claims.

Second, Ameranth argues that the claimed “technical database functions are advanced – including its API for database access and queries ...” Blue Br. 12. First, these database functions are not claimed. Moreover, as the specification discusses, these “advanced database functions” are provided by “an API called ActiveX Data Objects (“ADO”).” *Id.* (quoting Appx293 at 11:52-12:24). Contrary to Ameranth’s assertion, Ameranth did not invent the ADO API. The ADO API was a commonly known Microsoft product used with Windows CE for remote database access. Appx6583 at ¶257.

Third, Ameranth argues that “the usable file structure for a particular data processing application can be dictated by the user or an application program prior to or during the execution of the application program,” thereby providing “[e]fficiencies with respect to computational speed and equipment, e.g., storage and processor.” Blue Br. 12. In fact, no claim recites dictating a “usable file structure for a particular data processing application prior to or during execution of the

⁴ Ameranth argued no construction was necessary for “customized display layout,” but if the district court was inclined, it should mean: “a display layout that is customized based on the user’s device and appropriate for display and use on said device.” Appx2214. This would not exclude any scrolling.

application program.” *Berkheimer*, 881 F.3d at 1370 (improvements must be captured by claims). Moreover, alleged improvements in efficiency or speed utilizing conventional computer technology cannot avoid abstractness. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“relying on a computer to perform routine tasks more quickly or accurately is insufficient to render a patent claim eligible”).

Finally (and importantly), Ameranth’s current positions *contradict* its infringement positions. Ameranth argues now that the claims cover “improved systems which are designed to create customized GUI’s that can be displayed on various small screen sizes of handheld devices” and therefore “*obviated the need to have separate, individualized programming for each device.*” Blue Br. 17 (emphasis added). The district court ruled on claim construction that the “format[ing] ...for display as cascaded sets of linked GUI screens” must occur “outside the handheld devices.” Appx4793-4795. Yet, Ameranth asserted that Domino’s infringed even though Ameranth’s expert admitted that the alleged PHMC (JSON file) contained nothing that mandated “that it should be displayed as cascaded sets of GUI screens,” and that “*the actual linked, GUI screens are created by the GUI on the handheld,*” that is, separate programming on the handheld device. Appx4926 (citing Appx5779-5781 at 135:20-137:10; emphasis added). Thus, the detail Ameranth now argues

takes the claims out of abstractness is detail Ameranth contended was not a claim requirement in the district court.

Ameranth's purported invention is not a specific improvement to computer technology but instead merely uses conventional computer technology to organize and display menus. *TLI*, 823 F.3d at 612 (“[T]he focus” of the specification “and of the claims was not on an improved telephone unit or an improved server,” rather, the telephone unit is “merely a conduit for the abstract idea.”); *Smart Systems Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1375 (Fed. Cir. 2017) (“When claims like the Asserted Claims are ‘directed to an abstract idea’ and ‘merely requir[e] generic computer implementation,’ they ‘do[] not move into section 101 eligibility territory”) (quoting *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354 (Fed. Cir. 2014)). Ameranth merely computerizes the menu creation and formatting for different displays that has been done manually in restaurants (e.g. on paper menus and chalkboards) for centuries. Thus, “[t]his is a quintessential ‘do it on a computer’ patent” this Court has found “directed to abstract ideas.” *Univ. of Florida*, U.S. App. LEXIS 5568 at *8.

4. The '077 claims are comparable to claims found patent-ineligible and markedly different from those in cases cited by Ameranth

In addition to the *Apple* case, this Court has found numerous claims unpatentable where, just like the '077 claims, they are written in functional, result-

driven language, without specific details provided for how to implement the claimed function, other than through conventional computing technology. *Univ. of Florida*, U.S. App. LEXIS 5568 at *11; *Elec. Power Grp.*, 830 F.3d at 1354-1355 (noting claim requirement of “‘displaying concurrent visualization’ of two or more types of information” was insufficient to confer patent eligibility); *Interval Licensing*, 896 F.3d at 1344-1345 (“Recitation, as in this case, of the collection, organization, and display of two sets of information on a generic display device is abstract absent a ‘specific improvement to the way computers [or other technologies] operate’”).

Univ. of Florida is particularly pertinent here. There, the technology concerned the collection of physiological data from multiple bedside machines. *Univ. of Florida*, 2019 U.S. App. LEXIS 5568 at *7-8. Like the ’077 claims, the claims in *Univ. of Florida* were directed to formatting data for display on a remote device. *Id.* The *Univ. of Florida* claims recited a “data synthesis technology” in the form of “device drivers” that allow the central bedside device to display data from many different bedside machines “in a configurable fashion within a single interface.” *Id.* at *8. In both *Univ. of Florida* and here, the patent owners argued the claimed inventions “obviated the need to have separate individualized programming for each device.” Compare *id.* (It was necessary to write “tailored application[s] ... for [each] ... type of bedside machine” to display data from every

bedside machine on the user interface of a central device) and Blue Br. 17 (“which obviated the need to have separate, individualized programming for each device”).

This Court found the *Univ. of Florida* claims directed to an abstract idea, stating: “we cannot see in the claims, any ‘specific improvement to the way computers operate.’” 2019 U.S. App. LEXIS 5568 at *9 (quoting *Enfish*, 822 F.3d at 1336). This Court credited, just like *Apple* Court and the district court here, specification admissions that the “programmable action ... can be performed using any kind of computer system” and displayed on any “particular GUI.” *Id.*

The *Univ. of Florida* plaintiff argued that the claimed invention was an improvement in computer function because it required “a driver for each different bedside machine” that “can interpret device specific protocols ... of the bedside machine.” *Id.* at 10. This Court disagreed, finding the claimed drivers were described in “purely *functional* terms.” *Id.* at 11 (emphasis in original). The Court found the claims abstract for “fail[ing] to provide any technical details for the tangible components, ... instead predominately describ[ing] the system ... in purely functional terms,” and “[t]he mere function of converting is not a ‘specific improvement to the way computers operate.’” *Id.* (citing *Enfish*, 822 F.3d at 1336).

As in *Univ. of Florida*, the district court here properly found the ’077 claims abstract because they are written in purely functional terms, providing no details

regarding how to perform the functions other than utilizing well-known programming on conventional computer equipment. Appx11-13.

Ameranth asserts the '077 claims are comparable to those found patent-eligible in *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. 2018), *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1258 (Fed. Cir. 2017) and *Local Intelligence v. HTC America, Inc.*, 2018 WL 1697127 at *4 (N.D. Cal. April 6, 2018). Blue Br. 42. Ameranth is incorrect.

In *Core Wireless*, the claims detailed a new user interface with summary windows allowing devices with small screens to display information in a way never-before displayed. 880 F.3d at 1362-63. This Court found the claims improved the computer function by providing a unique way to view and access the computer's underlying applications in an unlaunched state, which was not provided by conventional GUIs; that is, the claims were not directed to "conventional user interface methods." *Id.* This Court held that the patent ***expressly claimed*** necessary requirements for the improved interface, including "a particular manner by which the summary windows must be accessed" and "a requirement that the device applications exist in a particular [unlaunched] state." *Id.* In contrast, Ameranth's alleged improved user interface is not only described in pure functional language, but uses a conventional graphical user interface merely as a tool to display menus differently on different display sizes. *Elec. Power Grp.*, 830 F.3d at 1354 ("abstract

ideas that use computers as tools” not patent eligible). *Affinity*, 838 F.3d at 1271-1272 (requirement of “customized user interface” abstract when claim does not describe how customization achieved).

In *Visual Memory*, the claims were directed to an “improved memory system” that configured operational characteristics of a computer’s cache memory based on the type of processor connected to the memory system. 867 F.3d at 1261. Depending on the processor type, the invention's memory caches could adjust their function, which allowed the claimed invention to accommodate different types of processors without compromising performance. *Id.* at 1256-57, 1259. The Court found the claims focused on a “specific asserted improvement in computer capabilities”—using programmable operational characteristics that are configurable based on processor type — instead of “a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1259-60. Unlike the ’077 patent, the claims were not simply recited in functional, result-based language, and devoid of any specificity. *Id.* Nor were the software programmed steps “well-known.” Indeed, the Court found significant that the computer source code was included in the patent. *Id.* at 1261. This Court found this to be a technological improvement in a “computer memory system” and thus not abstract. *Id.* at 1259.

In *Local Intelligence v. HTC America, Inc.*, 2018 WL 1697127 at *4 (N.D. Cal. April 6, 2018), an unpublished district court decision, the court denied a Rule

12(b)(6) motion to dismiss based on §101. Relying primarily on *Core Wireless*, the district court found that the claims were directed to an improvement in computer functionality by reciting a “*specific* manner of limiting the information which should be displayed” on a graphical user interface, and thus were not directed to an abstract idea. *Id.* at 21 (emphasis added). Significant to the district court’s finding was the fact that, unlike the ’077 claims, the “claims at issue do more than simply claim a result.” *Id.* at 22.

The claims at issue in *Core Wireless*, *Visual Memory* and *Local Intelligence* were each directed to a specific manner of improving computer functionality and not to “the result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *See Apple*, 842 F.3d at 1241. Indeed, none of those claims were directed to a resulting system that is *admittedly* implemented with “conventional” computer hardware, “commonly known” software elements and programming steps whose “details are not necessary to a full description of the invention.” Appx290-291 at 6:54-7:19; Appx293 at 12:57-61. These cases are not pertinent to the ’077 claims.

The district court correctly concluded that the ’077 claims are directed to an abstract idea.

D. The District Court Properly Concluded No Inventive Concept in the '077 Claims Transforms the Abstract Idea Into a Patentable Application

Turning to *Alice* step two, the '077 claim limitations, whether considered individually or as an ordered combination, do not transform the claimed abstract idea into a patent-eligible application. *Alice*, 573 U.S. at 217-18 (quoting *Mayo*, 132 S. Ct. at 1296-97).

Under *Alice*, the second step is a “search for an inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1296-97). The “inventive concept” must be more than “simply instruct[ing] the practitioner to implement the abstract idea with routine, conventional activity.” *Ulramercial*, 772 F.3d at 715. Moreover, “[f]or the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347-48 (quoting *Alice*, 573 U.S. at 225).

This Court has thus consistently held that claims reciting generic computers and computer functionality fail the “inventive concept” step. *See, e.g., Apple*, 842 F.3d at 1242 (Nothing in the claims “transform[s] the claimed abstract idea into a patent-eligible application of the abstract idea. The patents can readily be understood

as adding conventional computer components to well-known business practices”); *Ultramercial*, 772 F.3d at 715-16 (using “routine, conventional activity” of generic computers and Internet to provide content in exchange for viewing advertisement); *Symantec*, 838 F.3d at 1318 (disclosing “only generic computers performing generic functions” in email patent claims).

Moreover, this Court has been steadfast that high-level, result-oriented claims with “functional descriptions devoid of technical explanation as to how to implement the invention” are insufficient to confer patentability. *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 615 (Fed. Cir. 2016); see *Affinity*, 838 F.3d at 1271; *Elec. Power Grp.*, 830 F.3d at 1356. Put differently, the claims must improve “the way [the] computer functions.” *Symantec*, 838 F.3d at 1320.

1. The district court correctly ruled that the '077 claims fail step two where, among other things, the specification admits that the claimed invention employs “typical” hardware and “commonly known ... programming details”

The district court properly looked to *Apple* when it analyzed *Alice* step two. The *Apple* decision held that the '850, '325 and '733 claim limitations did not transform the abstract idea into a patent-eligible application of the idea. *Apple*, 842 F.3d at 1241-42. The *Apple* Court relied on specification admissions that the hardware components, GUIs, and menus are “typical” and “conventional,” and that the software programming steps are “commonly known.” *Id.* at 1241. Because “[i]t is not enough to point to conventional applications and say ‘do it on a computer,’”

Apple held the challenged claims of the related '850, '325, and '733 patents are unpatentable under §101. *Id.* at 1243 (citing *Alice*, 573 U.S. at 223).

In its step two analysis here, the district court properly, “look[ed] with more specificity at what the claim elements add, in order to determine whether they identify an inventive concept in the application of the ineligible subject matter to which the claim is directed.” Appx13 (citations omitted). In discussing the '077 claims' hardware limitations, the district court, like the *Apple* Court, found that the specification admitted the claimed hardware elements were all “typical” and “conventional.” Appx14. Similarly, in discussing the software limitations, the district court cited admissions in the specification that these limitations were “commonly known.” *Id.*

Ameranth argues the district court erred in relying on the *Apple* decision in *Alice* step two because: “[u]nlike the claims in *Apple*, the '077 patent's claims recite the programming/design details.” Blue Br. 27. To support this “programming/design details” assertion Ameranth states:

The claims require configuration software that is ***synchronized in real-time*** with information from the programmed handheld menu configuration with analogous information in the master database. *Id.* at 16:5-19; 17:52-18:1; 19:15-26. The claimed configuration software is further enabled to generate the ***programmed handheld menu configuration*** in conformity with a ***customized display layout*** for the wireless handheld computing device and ***compatible with the displayable size of the handheld graphical user interface device***. *Id.* at 16:20-29; 17:2-13; 19:30-38.

Blue Br. 27-28 (emphasis added).

These are the same “real time synchronous” and “PHMC” features addressed in step one. As discussed above, the ’077 patent merely claims software *that* “synchronize[s] in real-time,” a menu feature; it does *not* claim the “programming steps/details” that actually implement that feature. Likewise, claiming software *that* “generate[s] the claimed programmed handheld menu configuration” only claims a feature/result; it does *not* claim “a particular way of programming or designing the software” to create the PHMC. *Affinity*, 838 F.3d at 1271-1272 (claim limitation requiring “customized user interface” to deliver “user-selected content,” but which did not “reveal[] any concrete way of employing” that interface, did not supply an inventive concept).

Again, the ’077 patent itself directly refutes Ameranth, by stating:

The software applications for performing the functions falling within the described invention can be written in any commonly used computer language. The discrete programming steps are commonly known and thus *programming details are not necessary* to a full description of the invention.

Appx293 at 12:57-61 (emphasis added).

Indeed, if Ameranth were correct in its assertion that “the ’077 patent’s claims recite the programming/design details,” those claims would lack written description support, because the ’077 patent itself admits that “programming details are not necessary” and are *not* described. Appx293 at 12:59-61.

Ameranth wrongly asserts the district court “ignored its own prior contradictory ruling” that the “‘principal objects’ of the invention are directed to an **improved** information management and synchronous communication system.” Blue Br. 28-29, *citing* Appx4784 (emphasis in Blue Br.). First, the district court was not conducting a §101 analysis at claim construction. Second, the district court merely stated what the inventors contended were “principal objects” of the ’077 invention, not that the claimed invention achieved those objects. *See* Appx4784.

2. Ameranth’s admissions negate any arguments that the ’077 patent claims a patent eligible “hardware” or “software” invention

Ameranth asserts that the district court “incorrectly stated that Ameranth did not dispute that the hardware or software elements were typical and conventional, or commonly known, retrospectively.” Blue Br. 49. Yet, Ameranth admits on appeal: “Ameranth does *not* assert it invented the hardware or operating systems used to implement the claims. Indeed, the specification admits as much.” Blue Br. 49 (emphasis added).

Regarding software, Ameranth asserts that “the combination of *functions*” of the claimed software “were not routine or conventional.” *Id.* (emphasis added). Yet Ameranth admits that “by having [the software’s] functionality specifically recited in the claims, one of ordinary skill in the art could write the code and design the system to perform these functions.” Blue Br. 49-50. Ameranth thus admits on

appeal that the only purported invention is the software “functionality” and that “one of ordinary skill in the art *could* write the code” for the claimed functions. Blue Br. 49-50 (emphasis added). These admissions prove the district court was correct. In this Court’s words in *Apple*, “the [’077 patent] claims are directed to certain functionality.” *Apple*, 842 F.3d at 1241. The ’077 claims “do not claim a particular way of programming or designing the software to create menus that have” the claimed features/functions. *Id.* “Generally, a claim that merely describes an ‘effect or result disassociated from any method by which [it] is accomplished’ is not directed to patent-eligible subject matter.” *Id.* at 1244 (quoting *Internet Patents*, 790 F.3d at 1348).

The plaintiff in *Symantec*, like Ameranth here, asserted that its claims were not abstract because, although the technology was admittedly conventional, the inventive concept was in the claimed combination of features and functionality. 838 F.3d 1307, 1318-19 (Fed. Cir. 2016). This Court disagreed, explaining “the inquiry is not whether conventional computers already apply, for example, well-known business concepts like hedging [the concept in *Bilski*] or intermediated settlement [the concept in *Alice*]. Rather, we determine whether ‘each step does no more than require a generic computer to perform generic computer functions.’” *Id.* (quoting *Alice*, 573 U.S. at 224).

Similarly, in *TLI*, this Court held that when claims recite purely functional language and use conventional technology in a typical manner, they are not patent eligible as an “ordered combination.” 823 F.3d at 613-14. Like the ’077 patent, the specification in *TLI* discussed the claimed components in purely functional terms. *Id.* at 612. This Court rejected the patent owner’s argument that the combination of components added an inventive concept to confer patentability because the claims only recited “abstract functional descriptions devoid of technical explanation as to how to implement the invention.” *Id.* at 615. The district court here, as in *Symantec* and *TLI*, properly found no inventive concept in the “ordered combination” of “generic computer [components] performing generic functions.” *Symantec*, 838 F.3d at 1318-19.

3. Ameranth identifies no relevant disputed issues of fact

Ameranth incorrectly argues that the district court ignored “competing declarations,” which Ameranth alleges include “conflicting testimony” on “whether the claims cover routine and conventional activity” and create fact disputes “inappropriate for resolution on summary judgment.” Blue Br. 47. Ameranth is wrong because the district court properly relied on *specification admissions* that the claims cover the implementation of an abstract idea through “conventional” hardware and software. Where, as here, testimony from experts and others directly contradicts the specification and claims, courts are free to credit the admissions in

the patent over extrinsic, self-serving testimony. *Smith & Nephew, Inc. v. Rea*, 721 F.3d 1371, 1380 n.6 (Fed. Cir. 2013) (“Expert opinions that are contrary to admissions in the specification do not create a factual issue.”). As this Court has stated:

It is true that [the parties] submitted expert declarations, ... But the court did not rely on them in its §101 analysis. Instead, ..., the district court looked only to the claims and specifications of the patents-in-suit. The mere existence in the record of dueling expert testimony does not necessarily raise a genuine issue of material fact.

Mortg. Grader, Inc. v. Costco Wholesale Corp., 811 F.3d 1314, 1325 (Fed. Cir. 2016).

Regardless, the expert testimony does not address any relevant issues. Without citation, Ameranth asserts that the district court “disregarded” Ameranth’s factual evidence of “accolades” demonstrating unconventionality and solutions to technical problems. Blue Br. 17, 23. Ameranth’s evidence of purported “accolades” is irrelevant for two reasons.

First, any purported “accolades” are irrelevant because, as discussed *supra*, the ’077 claims use only functional language to achieve any purported solutions without any description of how to achieve them. *Two-Way Media*, 874 F.3d at 1339 (Assertions of technological solutions to problems do not make claims any less abstract when the claims “used generic functional language to achieve these purported solutions,” without “any requirements for how the desired result is

achieved”); *Univ. of Florida*, 2019 U.S. App. LEXIS 5568 at *9 (“That the automation can ‘result in life altering consequences,’ ... is laudable, but it does not render it any less abstract”). Thus, this evidence creates no relevant issue of fact.

Second, there is no nexus between any alleged “accolades” and the claimed invention. Ameranth’s alleged ‘accolades’ never mention the claimed “PHMC”/“cascaded sets”/“different number” of GUI screens features, nor the “real time synchronous” features.⁵ See Appx1477 (no evidence system embodied claims and no indication of what customer thought was “interesting”); Appx1481 (“buzz” concerned Ameranth “cocktail party,” discusses system with *single* handheld, not at least two handhelds with different display sizes); Appx1491 (No discussion of handhelds, their display sizes, whether screens were cascaded, or the number of GUI screens or “real time synchronization”); Appx1277-1278 (same). Thus, the alleged accolades provide no evidence of any features Ameranth asserts render the claims patent eligible.

Indeed, Ameranth relied on these same purported “accolades” as supportive of patentability (non-obviousness and unconventionality) in the CBMs (*see, e.g.*

⁵ Indeed, Ameranth never claimed its purported inventive concept of “customized display layouts” for at least two handheld devices with different display sizes and a different number of cascaded screens until 2012 (long after the alleged accolades), when the Examiner suggested these limitations in an Examiner’s Amendment. Appx5494, Appx5522-5523, ¶¶78-80.

Appx12871-12886_ and to this Court in *Apple* (see *Ameranth v. Agilysys et.al.*, Case No. 15-1792 at Doc. No. 69, p. 20) and the PTAB found no nexus between these purported “accolades” and these related claims. Appx12871-12886 (finding no nexus between evidence and “merits of claimed invention”).

Ameranth cites *Data Engine Technologies LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018), but that case favors Domino’s. Blue Br. 25. In *Data Engine*, this Court reversed a district court’s finding that claims directed to an alleged improved method for navigating a three-dimensional database were patent ineligible under §101. *Id.* at 1011. This Court found that the claimed invention solved a “known technological problem in computers in a particular way—by providing a highly intuitive, user-friendly interface with familiar *notebook tabs* for navigating the three-dimensional worksheet environment.” *Id.* at 1008-09 (emphasis added). The Court found the district court erred in not considering contemporaneous articles in the file history “touting the advantages of its use of *notebook tabs* to improve navigation through three-dimensional spreadsheets.” *Id.* at 1008, fn. 2 (emphasis added). The Court, however, required a strict nexus between the articles and the inventive “notebook tab” concept, stating that each article specifically “attributed the improved three-dimensional spreadsheets’ success to its *notebook tab* feature.” *Id.* (emphasis added). Critically, however, these articles did *not* render patent eligible a different claim that did “not recite the specific implementation of a

notebook tab interface.” *Id.* at 1012. Here, as discussed above, there is no nexus whatsoever between any alleged inventive concept and the purported evidence of any “accolades.”

4. The district court properly considered the claims as a whole and did not misunderstand them

Ameranth also incorrectly asserts that “[t]he District Court never considered the claims as a whole” (Blue Br. 55) and additionally misunderstood their meaning. *Id.* at 51. On the contrary, the district court expressly stated it considered the claims as a whole. Appx8 (quoting *Alice*’s observation that: “we consider the elements of each claim both individually and ‘as an ordered combination’”). Then after considering the claim elements both individually, and as a whole, it concluded: “[a]s with the related patents, there is nothing in these elements, either individually or in combination that ‘transform[s] the claimed abstract idea into a patent-eligible application of the abstract idea.’” Appx15, citing *Apple*, 842 F.3d at 1242.

Ameranth’s argument that the district court did not understand that the “claims require a system with at least two differently sized screens on at least two different handheld devices” (Blue Br. 51) likewise fails. In describing the claimed system, the district court described “devices” in the plural, stating: “configuring and transmitting hospitality information from a master menu/database to wireless handheld devices with different display screen sizes.” Appx10 (emphasis added). The district court also expressly considered the “a different number of user interface

screens from at least one other wireless handheld computing device in the system” limitation and thus understood the claim requirement that at least two devices with disparate screen sizes each displayed “a different number of user interface screens.” Appx13. Thus, the district court understood the claims to require at least two handheld devices with different display screen sizes.

Ameranth also wrongly asserts that because of this alleged misunderstanding, the district court did not appreciate that the '077 patent's “innovation” was “wirelessly ensuring data was consistent across multiple system nodes with different types and sizes of handhelds,” and that “[t]he minimal, built-in synchronization of Windows CE® identified in the [’077 specification], did not permit *wireless* synchronization among *all* nodes of a network nor in ‘real time’ as claimed.” Blue Br. 52, citing the Dedo declaration (emphasis in original). However, Mr. Dedo's declaration is irrelevant because nowhere in the claims (or specification) is it described *how* to “wirelessly ensur[e] data was consistent across multiple system nodes with different types and sizes of handhelds” in “real time.”⁶ Indeed, the only detail in the specification regarding synchronization is the built-in synchronization

⁶ Ameranth also mischaracterizes Mr. Dedo. Nowhere does he state that “Windows CE did not permit *wireless* synchronization among *all* nodes of a network nor in ‘real time.’” *See generally*, Appx11109-11115. Nor does he state that he understood Ameranth's system at the time could “wirelessly ensur[e] data was consistent across multiple system nodes with different types and sizes of handhelds” or in “real time.” *Id.*

of Windows CE. *See generally*, Appx276-297. Moreover, nowhere in the specification is it explained how synchronization between handhelds with different display sizes is any different from synchronization across handhelds regardless of display size – which the *Apple* Court ruled was “insignificant post-solution activity.” *Apple*, 842 F.3d at 1242. Finally, nowhere does the specification describe how synchronization is done differently in “real time,” which the district court construed to mean “having to do with the actual time during which physical events take place.” Appx4789. Indeed, the phrase “real time” only appears in the claims.

Because the claimed “real time” synchronization is claimed in functional, result-based language and there is no description of how this synchronization is accomplished, other than the built-in synchronization of Windows CE, it cannot provide the “inventive concept” necessary to transform the abstract idea of the ’077 claims into patent eligible subject matter. *Univ. of Florida*, 2019 U.S. App. LEXIS 5568 at *11-13.

E. The District Court Properly Dismissed All Claims Raised In Domino’s Counterclaim and Litigated by Ameranth on Summary Judgment

Contrary to Ameranth’s additional arguments, the district court: (1) properly treated claim 1 as representative of all claims, and (2) found patent ineligible claims that were properly at issue on summary judgment even though Ameranth was not specifically accusing Domino’s of infringing them.

1. Although claim 1 is representative of all claims, the district court analyzed all the asserted claims

Ameranth incorrectly asserts the district court erred in holding “claim 1 representative of all 18 claims” without analysis and against “Ameranth’s positions to the contrary.” Blue Br. 55-57. The district court considered all the claims, not just claim 1. Notwithstanding, there are no substantive differences between claim 1 and the other claims that would confer patentability.

Although the district court stated in its “Background” that claim 1 was representative, it did so to provide an example of the patent’s claims. Appx4-5. Nowhere did the district court state it was limiting its analysis to claim 1, nor did the district court so limit its analysis. This is apparent from the district court’s statement as to what the claims are directed, on which its analysis was based:

On their face, the claims are directed to a system for (1) configuring and transmitting *hospitality information* from a *master menu/database* to wireless handheld devices with different display screen sizes and (2) enabling real-time synchronous communications and formatting between the wireless handheld devices and the master database.

Appx10 (emphasis added). The district court’s statement includes limitations from all the claims. First, the district court used the phrase “hospitality information,” which refers to the “hospitality application information” of independent claim 13 – a phrase which, although not found in independent claims 1 and 9, would encompass the hospitality menus of those claims. *Id.* Next, the district court used the language “master menu/database” to refer both to the “master menu” of claims 1 and 9, and

the “master database” of independent claim 13. *Id.* Finally, throughout its analysis, the district court made findings relating to “the claims,” clearly evidencing it considered all claims – not just claim 1. Appx11-12 (e.g., “the claims of the ’077 patent are not directed to improving the capabilities of any particular computing device,” “the claims themselves are directed to the resulting system”). Thus, the district court considered all claims, not just claim 1 as representative, in its analysis.

Notwithstanding, claim 1 is representative of the other claims in the §101 analysis. Ameranth first asserts that independent claim 13 is different from independent claims 1 and 9 because it is directed to “hospitality application information” and not “menus.” Blue Br. 56. However, Ameranth took the contrary position before the PTAB, arguing that claim 13, like claims 1 and 9, includes “menus”:

The term [programmed handheld configuration] excluded “menu” as to claim 13, but clearly has the same meaning as [programmed handheld menu configuration] in claims 1 and 9, as is clear from claim 13 as a whole, including recitation of a master database including a “master database file structure” from which the handheld configuration is built, as well as the recitation of “for display as cascaded sets of linked graphical user interface screens,” which is clearly a multi-level menu configuration.

Appx3615, n.34. And a hospitality “menu” is certainly hospitality “information.”

Ameranth next asserts that claim 13 is different from claims 1 and 9 because of “the requirement for ‘simultaneous’ synchronization of **both** ‘handhelds’ and ‘web pages.’” Blue Br. 56 (emphasis in original). However, the ’077 patent does

not discuss how the claimed system synchronizes multiple handhelds any differently than it does both handhelds and web pages. Moreover, the specification does not, as Ameranth argues, “confirm[] that configuring for and synchronizing with both a handheld and a web page, concurrently was a ‘first’ – not routine and conventional.” Blue Br. 56 (citing Appx289-290 at 4:63 – 5:02). The cited passage discusses the alleged invention as a whole, not just synchronization between a handheld and a web page. *Id.*⁷

Ameranth also asserts that claim 1 is not representative of the dependent claims but does not argue specifics. Blue Br. 56. Nor did Ameranth do so before the district court, although it had ample opportunity. Indeed, in the initial Pizza Hut summary judgment briefing, Ameranth never separately addressed dependent claims 6 and 17 (although both were raised in Pizza Hut’s brief), and only addressed claim dependent claim 8 in a footnote. Appx7172, n.29. In the supplementation, although Ameranth substantively addressed claim 9, which was asserted against Domino’s, but not Pizza Hut, Ameranth again did not specifically address claims 6 and 17, repeated its cursory argument on claim 8, and made no specific arguments for the

⁷ Indeed, the PTAB found related ’850 claims invalid, in part, because synchronization between a database, handhelds and a Web page was known. Appx12759-12762 (“DeLorme ... discloses ... synchroniz[ation] between ... at least one wireless handheld [] device [and] ... and at least one Web page”); see also Appx12861 (“Brandt’s system ... teach[es] ... the recited synchronization.”)

remaining dependent claims. (Appx10258-10259). Thus, even if the district court had done so, it would not have been error to treat claim 1 as representative of the dependent claims. *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, __F.3d__; 2019 U.S. App. LEXIS 3645 *27-28 (Fed. Cir. Feb. 6, 2019) (“[T]he district court [need not] address arguments that Athena did not make. We thus find no error in the district court considering claims 7-9 as representative of claim 6.”)

2. The district court properly invalidated all claims asserted against the consolidated defendants that Ameranth and Domino’s had put at issue

Based on a recent decision from this Court, the Federal Rules, and the record before the district court, the district court had jurisdiction over all claims that were put at issue on summary judgment, i.e., all claims asserted against all parties, not just those specifically asserted against Domino’s. Thus, the full scope of the district court’s decision should be affirmed.

a. A recent decision supports the scope of the district court’s unpatentability ruling

In *Prism Techs. LLC v. Sprint Spectrum L.P.*, No. 2018-1108, __F.3d__, 2019 U.S. App. LEXIS 3281 (Fed. Cir., Feb. 1, 2019), this Court held that a motion for judgment as a matter of law (“JMOL”) of §101 unpatentability encompassed patent claims not then-asserted against the defendant/movant where: (1) the defendant raised a §101 counterclaim, *13-14; (2) the defendant’s motion went beyond the then-asserted claims, *6, *8; and (3) the plaintiff addressed the claims raised in

defendant's motion, *10-11. *Prism* and its facts show that the district court properly considered and found claims 1, 4-9, 11, 13-18 to be patent ineligible under §101.

In *Prism*, the plaintiff brought infringement claims on the same patents against both Sprint and T-Mobile. *Id.* at *1. Sprint was found to infringe claims of two patents, but in reviewing T-Mobile's motion for JMOL in its case, this Court held all claims at issue invalid under §101. *Id.* at *2. Sprint then sought relief from its infringement judgment, but Prism opposed, arguing two of the claims were not at issue in the *T-Mobile* action. *Id.* at *3, *4-5. The district court agreed with Sprint that all the claims raised against Sprint were found patent ineligible in *T-Mobile*, and Prism appealed. *Id.* at *4.

On appeal, this Court held that T-Mobile's motion for JMOL included claims not tried to the jury against T-Mobile, including the claims Sprint was found to infringe. *Id.* at *5, *10. The Court cited the following:

- T-Mobile's declaratory judgment counterclaim sought invalidity of all the patent claims. *Id.* at *5, *13-14;
- T-Mobile motion for JMOL incorporated an earlier motion for summary judgment, which sought ineligibility of claims not tried against T-Mobile, including the claims asserted against Sprint. *Id.* at *6, *10;
- On appeal, Prism "expressly discussed" the broad set of claims and identified aspects of those claims as "a specific and novel solution to real problems" to tout the benefits of its alleged invention. *Id.* at *10-11.

The facts here are similar to those in *Prism*. First, as in *Prism*, Domino's raised a counterclaim asserting that all claims of the '077 patent were patent ineligible under §101. Appx462-463 (asserting §101 declaratory judgment claim).

Second, as in *Prism*, Domino's motion went beyond the claims then-asserted against Domino's and requested judgment on all '077 claims: "The '**077 patent** is unpatentable under Section 101 for the same reasons set forth by the Federal Circuit. ... Based on the same analysis ..., which Ameranth did not appeal, **the claims of the '077 patent** are likewise unpatentable." Appx6398 (emphasis added).

Third, like *Prism*, Ameranth repeatedly addressed **all** the '077 claims when opposing Domino's motion. In fact, Ameranth asked the district court to find "**the claims of the '077 Patent**" patentable under §101. Appx10235 (emphasis added); *see also*, Appx10259. Further, Ameranth argued "the claims of the '077 Patent are not abstract" (Appx10237); "the claims of the '077 Patent are not directed to any abstract idea" (Appx10240); and "the claims of the '077 Patent are ... not merely the alleged 'abstract idea' of menu configuration and transmission." Appx10244. Finally, Ameranth argued that claims not specifically asserted against Domino's "have additional functionality and elements that render them non-conventional and patent-eligible ... such as POS importation, multiple hospitality application integration, and 'communications systemic relationship' interactivity." Appx10258-

Appx10259. As in *Prism*, Ameranth cannot now exempt claims that it used to argue patentability on summary judgment.

In short, the district court properly addressed all the claims that Domino's and Ameranth placed at issue on summary judgment.

b. Providing Ameranth notice and a reasonable time to respond, the district court properly addressed all the claims at issue

Beyond the fact that Domino's counterclaim and motion placed all the claims decided by the district court at issue, the Federal Rules also support the district court's decision to address all claims asserted against all parties. "After giving notice and a reasonable time to respond," a court may grant summary judgment (i) for a non-movant, (ii) on grounds not raised by a party, or (iii) consider summary judgment on its own. Fed. R. Civ. P. 56(f).

Here, Ameranth received notice of the claims at issue and responded substantively. In the district court's order allowing Domino's to step into Pizza Hut's shoes on summary judgment, the court noted: "there are more than thirty separate Defendants" defending against a patent that "may or may not satisfy the requirements of §101." Appx10228-10229. The district court further justified Domino's joinder to the motion because of "the importance of the §101 issue to *these cases*, and its potentially dispositive nature" *Id.* (emphasis added). Thus,

Ameranth was put on notice that claims asserted against all defendants were at issue on summary judgment.

Significantly, the district court granted Ameranth a 25-page supplemental brief even though the Pizza Hut motion was fully briefed. *Id.* If any doubt existed after initial briefing, the district court put Ameranth on explicit notice that all claims were being considered.⁸ Ameranth utilized all 25 pages to respond, asked the district court to hold *all* '077 claims patentable and presented §101 arguments on all claims. Appx10230, Appx10235, Appx10259.

Because Ameranth had notice of the claims at issue in the motion and the opportunity to respond, the district court properly granted summary judgment.

c. The case law cited by Ameranth is inapplicable and unpersuasive

Ameranth relies on *Fox Group, Inc. v. Cree, Inc.*, 700 F.3d 1300 (Fed. Cir. 2012) and *Allergan, Inc. v. Sandoz, Inc.*, 681 Fed. Appx. 955 (Fed. Cir. 2017) for the proposition that the district court lacked jurisdiction over the claims not asserted against Domino's. Blue Br. 58. However, these cases are inapplicable.

In *Fox*, this Court noted that the parties were on notice that only claims 1 and 19 were at issue. 700 F.3d at 1308. Similarly, the *Allergan* Court noted that the

⁸ Even Ameranth's first brief addressed all the '077 claims. Appx7172, fn. 28 (“[T]he ‘central processing unit’ of claims 1-12 ... and ‘master database’ of claims 13-18 ...”).

phrasing of defendant's response to Allergan's infringement assertion was limited to only three claims, and that the parties did not present evidence nor argument regarding any claims beyond those three. 681 Fed. Appx. at 963. Based on those circumstances, the Court held in both cases that the district court should not have invalidated claims that were not mentioned nor argued. *Fox*, 700 F.3d at 1308-09; *Allergan*, 681 Fed. Appx. at 963-64.

In contrast to these cases, both Domino's and Ameranth put all claims at issue, both in the pleadings and on summary judgment—distinctions rendering Ameranth's authority inapplicable. Thus, unlike *Fox* and *Allergan*, the parties were on notice that all the asserted claims were at issue. Indeed, Ameranth asked the district court to determine patentability in its favor for *all* the '077 claims, and made arguments supporting the patentability of those claims. The district court's decision was proper.

CONCLUSION

Domino's respectfully requests that this Court affirm the district court's judgment and find '077 claims 1, 4-9, 11 and 13-18 unpatentable under §101.

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CERTIFICATE OF ELECTRONIC SERVICE

I certify that I served a copy of BRIEF OF DEFENDANTS-APPELLEES, DOMINO'S PIZZA, LLC AND DOMINO'S PIZZA, INC. on counsel of record on March 7, 2019 by:

- U.S. Mail
- Fax
- Hand Delivery
- Electronic Means (by email or CM/ECF)

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**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME,
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This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a) or Federal Circuit Rule 28.1(b). This brief contains 13,520 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Federal Circuit Rule 32(b).

This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). This brief has been prepared in a proportionally spaced typeface using Microsoft® Word 2010 and Times New Roman typeface, 14-point.

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