



**ORAL ARGUMENT FOR
IPR2024-00305/00306
(U.S. PATENT NOS. 8,737,933 & 9,173,054)**

Before Administrative Patent Judges

- Jameson Lee
- Miriam L. Quinn
- Lisa A. Murray

McKool Smith

TABLE OF CONTENTS

A PRESUMPTIVE NEXUS EXISTS BETWEEN THE CLAIMED INVENTION AND AIRDROP

- AirDrop embodies the claimed features because detection is done using Bluetooth.
- AirDrop is coextensive with the claims because the claimed invention is the heart of AirDrop's functionality.
- The evidence presented does not rebut the presumption of nexus between the Challenged Claims and AirDrop.

SECONDARY CONSIDERATIONS SHOW CHALLENGED CLAIMS ARE PATENTABLE

- The claimed invention was described before the release of AirDrop.
- Evidence of commercial success and industry praise show that the Challenged Claims are non-obvious.
- Evidence of copying and long-felt but unsolved need based on continuous attempts to replicate the success of AirDrop shows that the Challenged Claims are non-obvious.
- The claimed invention was not disclosed in the prior art.

See generally POR; Sur Reply

A Presumptive Nexus Exists Between the Challenged Claims and Apple's AirDrop

AirDrop Embodies the Claimed Features Because it
Detects Wireless Transmit and Receive Units
(WTRUs) Using Bluetooth

Microsoft Asserts That Airdrop Does Not Embody the Claims

Here, the “product” identified by Patent Owner is the AirDrop functionality developed by third party Apple, which pre-installs AirDrop on its products. *AirDrop does not embody the claims*, at least because it does not perform the claimed “detecting, by the WTRU using Bluetooth, a plurality of other WTRUs.” And *AirDrop is not coextensive with the claims* at least because it is a relatively minor software component of the Apple devices and derives any success from being a seamless part of the Apple ecosystem. Moreover, many significant AirDrop features are not claimed by the ’933 patent, further disproving coextensiveness. For at least these reasons, Patent Owner has not established a presumption of nexus.

Microsoft’s Reply to POR at 3

POR at 33; Sur Reply at 2-7

Microsoft Only Disputes One of Multiple Claim Limitations

A. AirDrop Does Not Embody The Claimed Features Because Any Detecting Is Done Using Wi-Fi, Not Bluetooth

Claim elements [1.3] and [23.3] require that a sending device detect other devices using Bluetooth, e.g., element [1.3] recites, “detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU.” EX1001, 10:58-59; *see also id.* at 12:11-12 (“circuitry configured to detect, using Bluetooth, a plurality of WTRUs in proximity to the WTRU”).

Microsoft’s Reply to POR at 3

POR at 33; Sur Reply at 6

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US008737933B2

(12) **United States Patent**
Carlton et al.

(10) **Patent No.:** **US 8,737,933 B2**
(45) **Date of Patent:** **May 27, 2014**

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(72) Inventors: **Alan G. Carlton**, Minneapolis, MN (US);
Alexander Reznik, Timonium, MD (US)

(73) Assignee: **InterDigital Patent Holdings, Inc.**,
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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No. 12/133,334
(22) Filed: May 11, 2008
(65) US 2010/0111111 A1
(63) Continuation of Jun. 11, 2008, continuation of Dec. 22, 2008, Provisional 23, 2008.
(51) Int. Cl. H04W 4/00
(52) U.S. Cl. USPC 455/509
(58) Field of Classification Search USPC 455/509
See application for complete search history.

(56) **References Cited**
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2011/0126237 A1 5/2011 Lee et al.
2011/0138334 A1 6/2011 June

1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:
processing, by the WTRU, a touchscreen input to select a media element;
detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU;
processing, by the WTRU, another touchscreen input to select a WTRU of the plurality of WTRUs;
sending, by the WTRU, a message to transfer the selected media element to the selected WTRU;
receiving, by the WTRU, an acceptance to transfer the selected media element to the selected WTRU; and
transferring, by the WTRU using a WiFi communication, the selected media element to the selected WTRU.

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(12) **United States Patent**
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(10) **Patent No.:** **US 9,173,054 B2**
(45) **Date of Patent:** ***Oct. 27, 2015**

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(52) **U.S. CL.**
CPC *H04W 4/00* (2013.01); *G06F 3/0482* (2013.01); *G06F 3/0488* (2013.01); *H04L 67/16* (2013.01); *H04L 67/18* (2013.01); *H04W 4/02* (2013.01)

(58) **Field of Classification Search**
CPC combination set(s) only.
See application file for complete search history.

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sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;
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(21) Appl. No. 12/544,321
(22) Filed: Jun. 11, 2009
(65) US 2010/0146347 A1
(63) Continuation of Jun. 11, 2009, continuation of Dec. 22, 2008, Provisional Patent Application No. 61/197,101
(51) Int. Cl. H04W 4/00
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sending, by the WTRU, a message to transfer the selected media element to the selected WTRU;
receiving, by the WTRU, an acceptance to transfer the selected media element to the selected WTRU; and
transferring, by the WTRU using a WiFi communication, the selected media element to the selected WTRU.

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CPC *H04W 4/008* (2013.01); *G06F 3/0482* (2013.01); *G06F 3/0488* (2013.01); *H04L 67/16* (2013.01); *H04L 67/18* (2013.01); *H04W 4/02* (2013.01)

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sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;
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transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.

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(21) Appl. No.: **13/930,743**

(22) Filed: **Jun. 28, 2013**

(65) **US 2014/0111221 A1**

(63) Continuation of Jun. 11, 2013, continuation of Dec. 22, 2008, Provisional Patent Application No. 61/230,808.

(51) Int. Cl. **H04W 88/00**

(52) U.S. Cl. **USPC 455/509**

(58) Field of Classification Search
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(23) A wireless transmit/receive unit (WTRU) comprising:
a processor configured to process a touchscreen input to select a media element;
circuitry configured to detect, using Bluetooth, a plurality of WTRUs in proximity to the WTRU;
the processor is further configured to process another touchscreen input to select a WTRU of the plurality of WTRUs;
circuitry configured to send a message to transfer the selected media element to the selected WTRU;
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(51) Int. Cl. **H04W 4/00**

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8,611,317 B2 12/2013 Hansen et al.
8,737,933 B2* 5/2014 Carlton et al. 455/73

(23) A wireless transmit/receive unit (WTRU) comprising:
circuitry configured to process, from a touch display, an input to select media in an application;
circuitry configured to detect, by the WTRU over bluetooth, another WTRU;
the circuitry further configured to process another input from the touch display to select the another WTRU;
circuitry configured to send, by the WTRU to the selected another WTRU, a message to transfer the selected media;
circuitry configured to receive, by the WTRU, an acceptance to transfer the selected media; and
circuitry configured to transfer, by the WTRU to the selected another WTRU over WiFi, the selected media.

Microsoft Only Disputes One of Multiple Claim Limitations

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(21) Appl. No.: **13/930,743**

(22) Filed: **Jun. 28, 2013**

(65) **US 2014/0111179 A1**

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(58) Field of Classification Search
USPC 455/509
See application file for complete search history.

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circuitry configured to send a message to transfer the selected media element to the selected WTRU;
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(60) Provisional application No. 61/655,965, filed Jun. 22, 2013.

(51) Int. Cl. **H04W 4/40**

(52) U.S. Cl. **USPC 455/509**

(58) Field of Classification Search
USPC 455/509
See application file for complete search history.

(56) **References Cited**
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8,611,317 B2 12/2013 Banerjee et al.
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(23) A wireless transmit/receive unit (WTRU) comprising:
circuitry configured to process, from a touch display, an input to select media in an application;
circuitry configured to detect, by the WTRU over bluetooth, another WTRU;
the circuitry further configured to process another input from the touch display to select the another WTRU;
circuitry configured to send, by the WTRU to the selected another WTRU, a message to transfer the selected media;
circuitry configured to receive, by the WTRU, an acceptance to transfer the selected media; and
circuitry configured to transfer, by the WTRU to the selected another WTRU over WiFi, the selected media.

The Challenged Claims Only Require the Use of Bluetooth During Detection

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(22) Filed: **Jun. 28, 2013**

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Related U.S. Application Data

(63) Continuation of application No. 13/493,650, filed on Jun. 11, 2012, now Pat. No. 8,478,207, which is a continuation of application No. 12/644,948, filed on Dec. 22, 2009, now Pat. No. 8,200,265.

(60) Provisional application No. 61/140,126, filed on Dec. 23, 2008.

(51) **Int. Cl.** **H04W 88/02** (2009.01)

(52) **U.S. Cl.** **USPC** **455/73**

(58) **Field of Classification Search**
USPC 455/73, 75, 436, 509, 522, 370/311, 370/328, 330, 331, 335, 338, 350; 375/145
See application file for complete search history.

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Primary Examiner — Diane Mizrahi
(74) **Attorney, Agent, or Firm** — Volpe and Koenig, P.C.

(57) **ABSTRACT**
Detecting, with Bluetooth, wireless transmit/receive units (WTRUs) in proximity to a WTRU is disclosed. The WTRU may send a message to transfer of a selected media to a selected WTRU. The WTRU may receive an acceptance to transfer the selected media to the selected WTRU. The selected media is transferred to the selected WTRU.

44 Claims, 9 Drawing Sheets

detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU;

- Detecting includes the process of identifying other WTRUs and only requires that Bluetooth is involved at some point in the detection.
- Microsoft's arguments improperly read a limitation into the claim, that *only* Bluetooth may be used when detecting:

Detecting, by the WTRU only using Bluetooth, a plurality of WTRUs in proximity to the WTRU;

Bluetooth is Used for Detection

AirDrop operation

AirDrop uses iCloud services to help users authenticate. When a user signs in to iCloud, a 2048-bit RSA identity is stored on the device, and when the user turns on AirDrop, an AirDrop short identity hash is created based on the email addresses and phone numbers associated with the user's Apple ID.

When a user chooses AirDrop as the method for sharing an item, the sending device emits an AirDrop signal over BLE that includes the user's AirDrop short identity hash. Other Apple devices that are awake, in close proximity, and have AirDrop turned on, detect the signal and respond using peer-to-peer Wi-Fi, so that the sending device can discover the identity of any responding devices.

Ex-2014

Microsoft Reads Limitations Into the Challenged Claims

Bluetooth for solicitation is not using Bluetooth for detection. *Id.*, ¶10. For example,

FIG. 4 shows that detection occurs “in response to solicitation”:

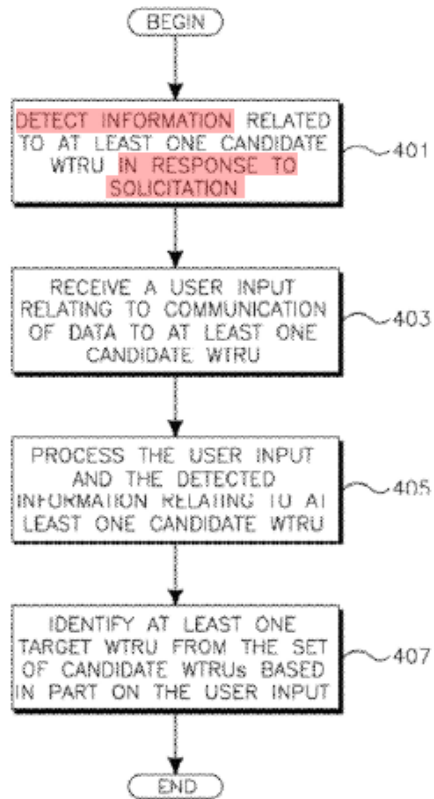


FIG. 4

EX1001, Fig. 4 (highlighting added). Consistent with this, the '933 patent describes

13 (“Bluetooth detection of proximate WTRUs”), 16, 20, 26. Similarly, dependent claims recite detecting using a Bluetooth service discovery protocol (SDP) (e.g., claims 8-9), and the written description describes using Bluetooth for discovery (EX1001, 5:38-6:3) but makes no mention of using Wi-Fi for discovery or detection. EX1086, ¶¶11-12.

Microsoft’s Reply to POR at 6

- Courts must “avoid the danger of reading limitations from the specification into the claim”

Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005).

- “[A]lthough the specification often describes very specific embodiments of the invention, **we have repeatedly warned against confining the claims to those embodiments.**”

Id.

Microsoft’s Reply to POR at 5

Sur Reply at 4

Detecting Using Bluetooth is Undeniably Present in AirDrop

How to use AirDrop on your iPhone or iPad

Use AirDrop to share and receive photos, documents, and more with other Apple devices that are nearby.

Before you begin

- Make sure that the person you're sending to is nearby and within Bluetooth and Wi-Fi range.
- Check that you and the person you're sending to have Wi-Fi and Bluetooth turned on. If either of you have Personal Hotspot on, turn it off.
- Check if the person you're sending to has their AirDrop set to receive from Contacts Only. If they do, and you're in their Contacts, they need to have your Apple ID's email address or mobile number in your contact card for AirDrop to work.
- If you're not in their Contacts, have them [set their AirDrop receiving setting to Everyone](#) in order to receive the file.

You can put your AirDrop receiving setting to [Contacts Only](#) or [Receiving Off](#) at any time to control who can see your device and send you content in AirDrop.

Ex-2016, 2

POR at 18, 29; Sur Reply at 4

Detecting Using Bluetooth is Undeniably Present in AirDrop

How to use AirDrop on your iPhone or iPad

Use AirDrop to share and receive photos, documents, and more with other Apple devices that are nearby.

Turn on Wi-Fi and Bluetooth on both iPhone devices.

AirDrop transfers data using Wi-Fi and Bluetooth.

Note

AirDrop uses Bluetooth to discover nearby devices and Wi-Fi to transfer data between devices. If the devices leave Bluetooth or Wi-Fi range of each other after you initiate an AirDrop transfer, the transfer can continue over the internet.

- If you're not in their Contacts, have them set their AirDrop receiving setting to Everyone in order to receive the file.

You can put your AirDrop receiving setting to Contacts Only or Receiving Off at any time to control who can see your device and send you content in AirDrop.

Ex-2011, 2

Ex-2016, 2

POR at 18, 29; Sur Reply at 4

Detecting Using Bluetooth is Undeniably Present in AirDrop

How to use AirDrop on your iPhone or iPad

Use AirDrop to share and receive photos, documents, and more with other Apple

devices that are nearby.

Turn on Wi-Fi and Bluetooth on both iPhone devices.

AirDrop transfers data using Wi-Fi and Bluetooth.

On the technical side of things, AirDrop uses a mixture of Bluetooth 4.0LE and Wi-Fi so you'll need to have both enabled on both devices. **AirDrop uses Bluetooth to talk to iOS devices in the local area** and then transfers files using Wi-Fi. The files are – according to Apple – transmitted securely (although Apple hasn't confirmed which security system it is using).

devices leave Bluetooth or Wi-Fi range of each other after you initiate an AirDrop transfer, the Ex-2024, 2 can continue over the internet.

- If you're not in their Contacts, have them set their AirDrop receiving setting to Everyone in order to receive the file.

Ex-2011, 2

You can put your AirDrop receiving setting to Contacts Only or Receiving Off at any time to control who can see your device and send you content in AirDrop.

Ex-2016, 2

POR at 18, 29; Sur Reply at 4

A Presumptive Nexus Exists Between the Challenged Claims and Apple's AirDrop

AirDrop is Coextensive With the Challenged Claims

Microsoft Asserts That Airdrop is Not Coextensive With the Challenged Claims

Here, the “product” identified by Patent Owner is the AirDrop functionality developed by third party Apple, which pre-installs AirDrop on its products. *AirDrop does not embody the claims*, at least because it does not perform the claimed “detecting, by the WTRU using Bluetooth, a plurality of other WTRUs.” And *AirDrop is not coextensive with the claims* at least because it is a relatively minor software component of the Apple devices and derives any success from being a seamless part of the Apple ecosystem. Moreover, many significant AirDrop features are not claimed by the ’933 patent, further disproving coextensiveness. For at least these reasons, Patent Owner has not established a presumption of nexus.

Microsoft’s Reply to POR at 3

POR at 34; Sur Reply at 7

Existence of Unclaimed Features Does Not Preclude a Presumption of Nexus

“[T]he mere existence of one or more unclaimed features **does not** necessarily mean presuming nexus is inappropriate.”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1376 (Fed. Cir. 2019)

The unclaimed features must be **significant**.

Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc., 24 F.4th 1406, 1418 (Fed. Cir. 2022) (citing *Teva Pharms. Int’l GmbH v. Eli Lilly and Co.*, 8 F.4th 1349, 1361 (Fed. Cir. 2021))

None of AirDrop's Unclaimed Features are Significant

Unclaimed features are significant when they are:

(1) “**critical**” and

(2) “**materially impact[] the products functionality.**”

Quanergy Sys., 24 F.4th at 1418

None of AirDrop's Unclaimed Features are Critical or Material to its Functionality

Moreover, AirDrop includes significant, unclaimed features, including device visibility controls implemented using iCloud services-based authentication; security, including encryption; and tight integration within the Apple ecosystem. EX1086, ¶15.

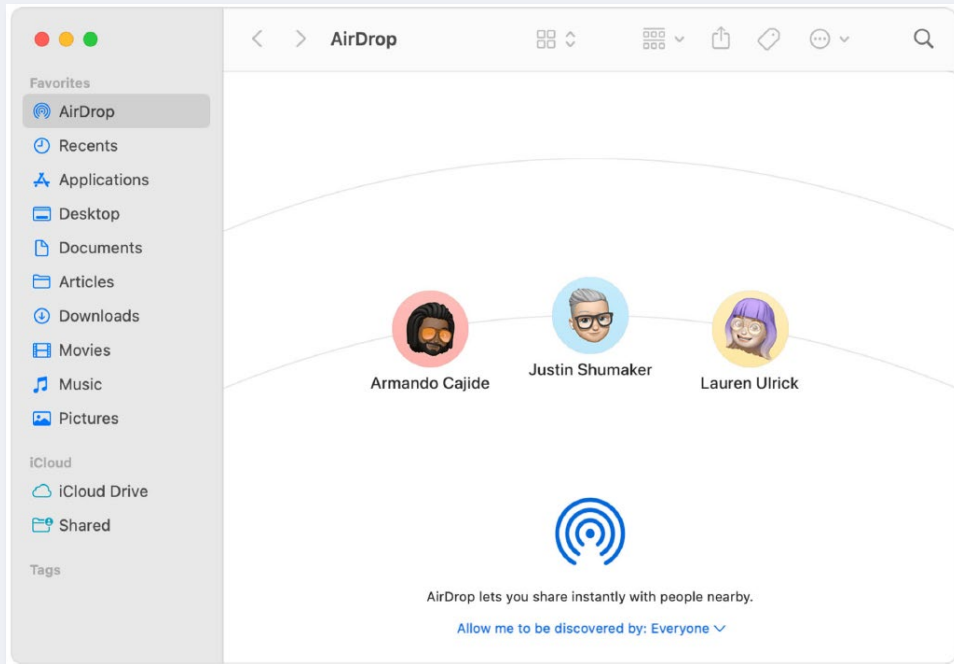
Microsoft's Reply to POR at 8

None of AirDrop's Unclaimed Features are Critical or Material to its Functionality

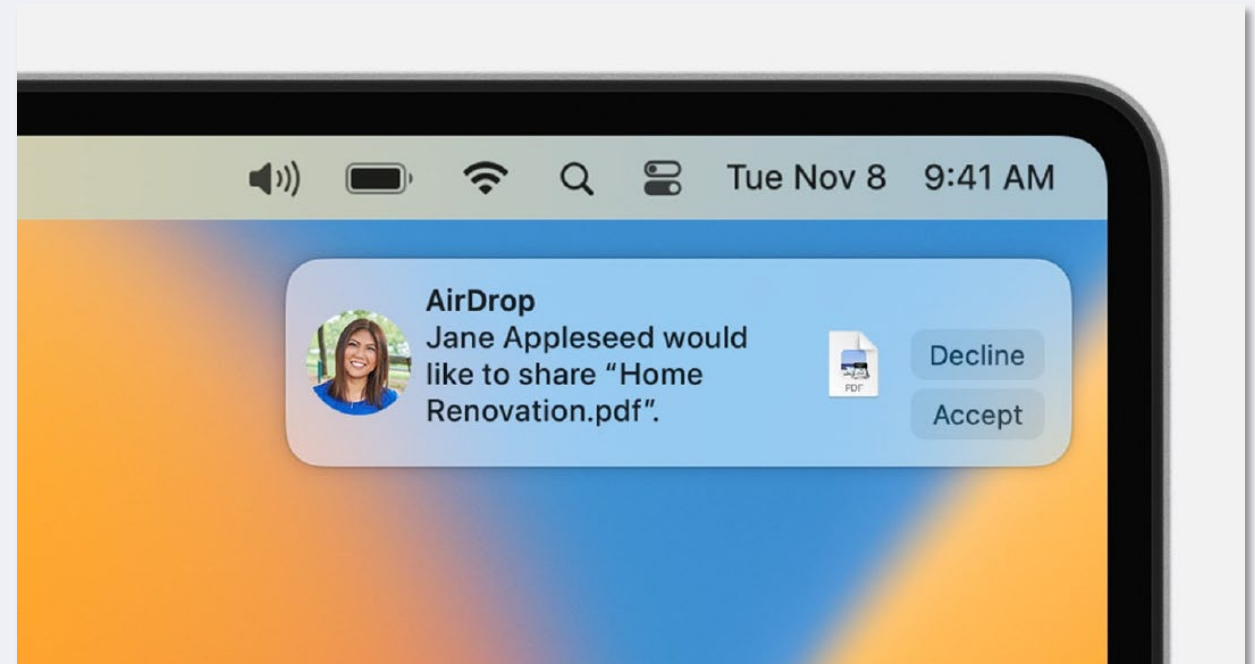
How to use AirDrop on your iPhone or iPad

Use AirDrop to share and receive photos, documents, and more with other Apple devices that are nearby.

Ex-2015, 1



Ex-2012, 2



Ex-2012, 2

Sur Reply at 8-9

Microsoft Claims AirDrop Benefited From Apple's "Ecosystem and Market Dominance"

Furthermore, AirDrop benefited from the Apple ecosystem and market dominance, neither of which could be claimed by the '933 patent. *Infra* Section III.C-D.

Microsoft's Reply to POR at 10

Every Apple Product Does Not Benefit From Apple's "Ecosystem and Market Dominance"

TECH

Why Apple Had To Release Its Terrible Maps App Now

Shel Israel Former Contributor ⓘ

I cover mobile, social, sensor, location, data & pinpoint marketing

Sep 29, 2012, 02:32pm EDT

Updated Oct 1, 2012, 11:01am EDT

Ex-2056

Strategy

Why Apple Music Missed a Beat

by Mark Bonchek and William Patrick

September 25, 2015

Ex-2057

JULIAN CHOKKATTU GEAR MAR 20, 2024 7:00 AM

Review: Apple Vision Pro

The Vision Pro is a big leap for spatial computing in an unfriendly package.

Ex-2058

Sur Reply at 9-10

A Presumptive Nexus Exists Between the Challenged Claims and Apple's AirDrop

Microsoft Has Failed to Rebut the Presumption of
Nexus

Extraneous Factors Do Not Rebut the Presumptive Nexus

Even had Patent Owner established a presumption of nexus, it would be rebutted because any alleged AirDrop objective indicia were due, not to the claimed method, but rather to (i) extraneous factors such as Apple's market share and ecosystem (*infra* Section III.C-D); (ii) unclaimed features such as enhanced security, privacy, ease of use, and ability to accept/reject a transfer (*supra* Section II.B; *infra* Section III.C); and (iii) features known in the art, such as detection using Bluetooth and transfer using Wi-Fi (*e.g.*, *infra* Section III.E). *See e.g., Ormco Corp. v. Align*

Microsoft's Reply to POR at 11

Extraneous Factors Do Not Rebut the Presumptive Nexus

Even had Patent Owner established a presumption of nexus, it would be rebutted because any alleged AirDrop objective indicia were due, not to the claimed method, but rather to (i) extraneous factors such as Apple's market share and ecosystem (*infra* Section III.C-D); (ii) unclaimed features such as enhanced security, privacy, ease of use, and ability to accept/reject a transfer (*supra* Section II.B; *infra* Section III.C); and (iii) features known in the art, such as detection using Bluetooth and transfer using Wi-Fi (*e.g.*, *infra* Section III.E). *See e.g., Ormco Corp. v. Align*

Microsoft's Reply to POR at 11

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Microsoft's Reply to POR at 11

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Microsoft's Reply to POR at 11

Secondary Considerations Show the Challenged Claims are Patentable

The Claimed Invention was Described Prior to the
Release of AirDrop

USPTO Allowed the Claims to Issue When Filed

	UNITED STATES PATENT AND TRADEMARK OFFICE		UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov			
	NOTICE OF ALLOWANCE AND FEE(S) DUE					
24374 7590 01/13/2014 VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103		EXAMINER MIZRAHI, DIANE D				
		ART UNIT 2645	PAPER NUMBER			
DATE MAILED: 01/13/2014						
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
13/930,743	06/28/2013	Alan G. Carlton	IPH-2-2235US04	1304		
TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES						
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	04/14/2014

Ex-1002, 108

Secondary Considerations Show the Challenged Claims are Patentable

Commercial Success and Industry Praise

Multiple Exhibits Emphasize AirDrop's Commercial Success

How iOS 7's AirDrop Could Transform The Way We Share

Ex-2023, 6

According to [mobile market](#) analyst [Chetan Sharma](#), AirDrop should prove a “better way to share than text or email.” He also noted that AirDrop could enable other “communication modes” such as “airdropping a coupon instead of email them.”

AirDrop review:

On the whole it's worth noting that AirDrop is a fantastic technological implementation of frictionless file sharing. We've never encountered any system that makes it so easy to pass a file from one device to another. There are limits to it, in particular you can't share certain file types, and you can only share

Ex-2024, 4

AirDrop 101: Easily Send Content Between Nearby iPhones, iPads, and Macs

Ex-2027, 1

If you have Apple devices, AirDrop is a simple way to send content back and forth with another person -- or between your devices. It just takes a few taps, and everything happens entirely wirelessly. If someone is nearby -- and they have to be nearby, within Bluetooth range -- you won't need to rely on SMS, iMessage, email, or other communication apps to send stuff back and forth.

POR at 38; Sur Reply at 17

Nested Bean IPR is Inapposite

Forbes

VS

Macworld

★★★★★ **Great quality Sack**

Reviewed in the United States on January 10, 2025

Color: Gray | Size: Medium (13-19 lbs.) | **Verified Purchase**

This sack has been a life saver for me and my baby, it's very comfy, soft and fits just right. Definitely helps baby stay asleep longer since it prevents baby to un swaddle. The material is great quality with enough thickness, stretch, it is breathable and the fit is true to size according to the suggested measurements on the the product's description. It fits snug just enough to help baby self soothe, and has just enough space on baby's legs. Easy to wash and does not wrinkle easily, great value for the money.



8 people found this helpful

Helpful | Report

★★★★★ **Worth Every Penny!! Finally Sleeping!**

Reviewed in the United States on February 15, 2025

Color: Gray | Size: Small (8-13 lbs) | **Verified Purchase**

After looking at countless swaddles and reading a ton of reviews, we bought this for our 4 week old after a really tough week of no sleep and many broken swaddles (we used the Velcro ones). Night one of using this swaddle he slept for two long stretches, 4 and 5 hours!! All new parents can agree this is a WIN! I wish we bought this weeks ago. It takes away the stress of wondering if your baby will break your air tight swaddle or if they're able to stretch their legs out to prevent any risk of hip dysplasia. Although it's pricey, it is truly worth every penny!! It's also very soft and breathable, so you know your baby won't overheat and increase any risk of SIDS. Make sure you look at the sizes, and don't size up hoping your baby will grow into it quickly. To have the right fit, you have to make sure you purchase the correct size. Believe me, you won't be disappointed!! We're purchasing more as soon as this review is submitted!

6 people found this helpful

Helpful | Report

AirDrop's Industry Praise is Not a Byproduct of Apple's "Unified Ecosystem"

TECH

Why Apple Had To Release Its Terrible Maps App Now

Shel Israel Former Contributor ⓘ

I cover mobile, social, sensor, location, data & pinpoint marketing

Sep 29, 2012, 02:32pm EDT

Updated Oct 1, 2012, 11:01am EDT

Ex-2056

Strategy

Why Apple Music Missed a Beat

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Ex-2057

JULIAN CHOKKATTU GEAR MAR 20, 2024 7:00 AM

Review: Apple Vision Pro

The Vision Pro is a big leap for spatial computing in an unfriendly package.

Ex-2058

Sur Reply at 19

The Challenged Claims Account For “Security Concerns”

US008737933B2

(12) **United States Patent**
Carlton et al.

(10) **Patent No.:** **US 8,737,933 B2**
(45) **Date of Patent:** **May 27, 2014**

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(72) Inventors: **Alan G. Carlton**, Mineola, NY (US);
Alexander Reznik, Titusville, NJ (US)

(73) Assignee: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No. 12/131,111
(22) Filed: Jun. 11, 2008
(65) US 2010/0111111 A1
(63) Continuation of Jun. 11, 2008, provisional patent application Ser. No. 60/911,111, filed Jun. 11, 2008.
(60) Provisional Patent Application Ser. No. 60/911,111, filed Jun. 11, 2008.
(51) Int. Cl. H04W 4/00
(52) U.S. Cl. 455/509
(58) Field of Classification Search USPC 455/509
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
5,544,321 A 8/1996 Thimer et al.
7,877,494 B2 1/2011 Carlton et al.
8,200,265 B2* 6/2012 Carlton et al. 455/509
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2006/0234762 A1 10/2006 Orhan
2006/0293063 A1 12/2006 Corson
2007/0146347 A1 6/2007 Rosenberg
2007/0177729 A1 8/2007 Reznik et al.
2007/0271179 A1 11/2007 Carlton et al.
2010/0165965 A1* 7/2010 Carlton et al. 370/338
2011/0119702 A1 5/2011 Jiang et al.
2011/0119710 A1 5/2011 Jiang et al.
2011/0126237 A1 5/2011 Lee et al.
2011/0138334 A1 6/2011 Jung

1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:
processing, by the WTRU, a touchscreen input to select a media element;
detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU;
processing, by the WTRU, another touchscreen input to select a WTRU of the plurality of WTRUs;
sending, by the WTRU, a message to transfer the selected media element to the selected WTRU;
receiving, by the WTRU, an acceptance to transfer the selected media element to the selected WTRU; and
transferring, by the WTRU using a WiFi communication, the selected media element to the selected WTRU.

US009173054B2

(12) **United States Patent**
Carlton et al.

(10) **Patent No.:** **US 9,173,054 B2**
(45) **Date of Patent:** ***Oct. 27, 2015**

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(72) Inventors: **Alan G. Carlton**, Mineola, NY (US);
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(73) Assignee: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(52) **U.S. CL**
CPC *H04W 4/008* (2013.01); *G06F 3/0482* (2013.01); *G06F 3/0488* (2013.01); *H04L 67/16* (2013.01); *H04L 67/18* (2013.01); *H04W 4/02* (2013.01)

(58) **Field of Classification Search**
CPC combination set(s) only.
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
5,544,321 A 8/1996 Thimer et al.
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2011/0126237 A1 5/2011 Lee et al.
2011/0138334 A1 6/2011 Jung

1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:
processing, by the WTRU from a touch display, an input to select media in an application;
detecting, by the WTRU over bluetooth, another WTRU;
processing, by the WTRU, another input from the touch display to select the another WTRU;
sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;
receiving, by the WTRU, an acceptance to transfer the selected media; and
transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.

The Challenged Claims Account For “Security Concerns”

US008737933B2

(12) **United States Patent**
Carlton et al.

(10) Patent No.: **US 8,737,933 B2**
(45) Date of Patent: **May 27, 2014**

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(72) Inventors: **Alan G. Carlton**, Mineola, NY (US);
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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/930,743**

(22) Filed: **Jun. 28, 2013**

(65) **US 2014/0111111 A1**

(63) Continuation of Jun. 11, 2013, of Provisional Patent Application No. 61/655,965, filed Jun. 22, 2013.

(51) Int. Cl. **H04W 88/08**

(52) U.S. Cl. **USPC 455/509**

(58) Field of Classification Search
USPC 455/509
See application file for complete search history.

(56) **References Cited**
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2011/0126237 A1 5/2011 Lee et al.
2011/0138334 A1 6/2011 Jung
2012/0252312 A1* 10/2012 Carlton et al. 455/509

(23) A wireless transmit/receive unit (WTRU) comprising:
a processor configured to process a touchscreen input to select a media element;
circuitry configured to detect, using Bluetooth, a plurality of WTRUs in proximity to the WTRU;
the processor is further configured to process another touchscreen input to select a WTRU of the plurality of WTRUs;
circuitry configured to send a message to transfer the selected media element to the selected WTRU;
circuitry configured to receive an acceptance to transfer the selected media element to the selected WTRU; and
circuitry configured to transfer, using a WiFi communication, the selected media element to the selected WTRU.

US009173054B2

(12) **United States Patent**
Carlton et al.

(10) Patent No.: **US 9,173,054 B2**
(45) Date of Patent: ***Oct. 27, 2015**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/251,381**

(22) Filed: **Jan. 14, 2014**

(65) **US 2014/0111111 A1**

(63) Continuation of Jun. 28, 2013, of Provisional Patent Application No. 61/655,965, filed Jun. 22, 2013.

(51) Int. Cl. **H04W 4/40**

(52) U.S. Cl. **USPC 455/509**

(58) Field of Classification Search
USPC 455/509
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
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8,478,207 B2* 7/2013 Carlton et al. 455/73
8,611,317 B2 12/2013 Hansen et al.
8,737,933 B2* 5/2014 Carlton et al. 455/73

(23) A wireless transmit/receive unit (WTRU) comprising:
circuitry configured to process, from a touch display, an input to select media in an application;
circuitry configured to detect, by the WTRU over bluetooth, another WTRU;
the circuitry further configured to process another input from the touch display to select the another WTRU;
circuitry configured to send, by the WTRU to the selected another WTRU, a message to transfer the selected media;
circuitry configured to receive, by the WTRU, an acceptance to transfer the selected media; and
circuitry configured to transfer, by the WTRU to the selected another WTRU over WiFi, the selected media.

Secondary Considerations Show the Challenged Claims are Patentable

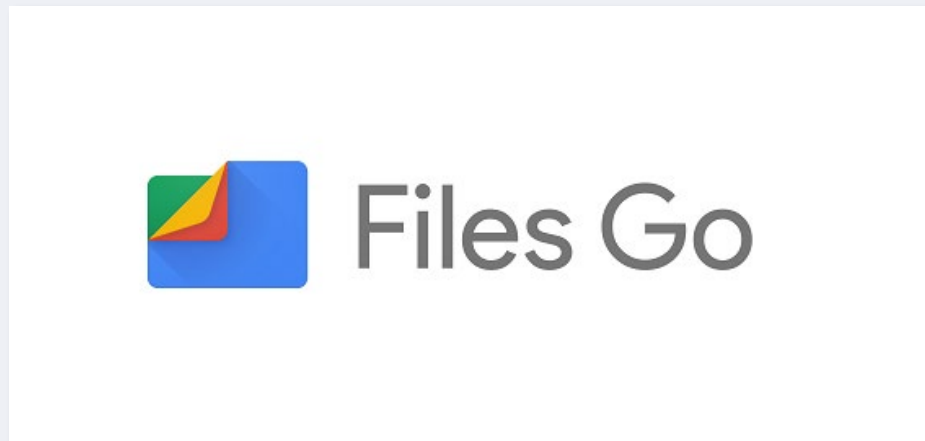
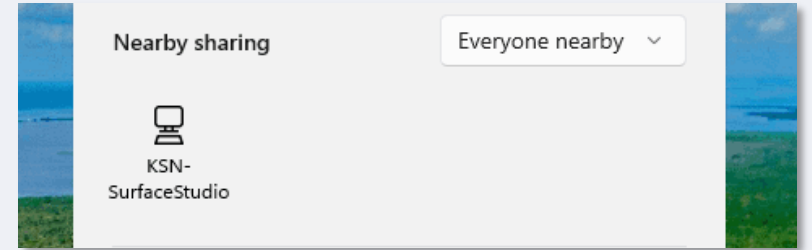
Evidence of Copying and Long-Felt Need

Evidence of Copying and Failure of Others is Often “Most Probative”

“Objective considerations such as failure by others to solve the problem and copying, ‘may often be the **most probative and cogent evidence**’ of nonobviousness.”

Advanced Display Sys., Inc. v. Kent State University, 212 F.3d 1272, 1285 (Fed. Cir. 2000) (quoting *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983)) (cleaned up) (emphasis added)

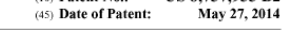
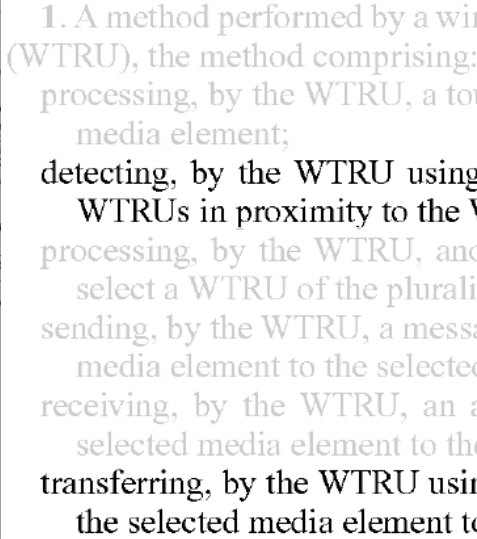
Multiple Attempts by Competitors to Copy AirDrop

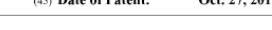


Secondary Considerations Show the Challenged Claims are Patentable

The Claimed Invention Was Not Disclosed in the Prior
Art

Microsoft Ignores Remaining Claim Limitations and the Patentable Combination

		 US008737933B2	
(12)	United States Patent Carlton et al.	(10) Patent No.: US 8,737,933 B2	
		(45) Date of Patent: May 27, 2014	
(54)	DATA TRANSFER BETWEEN WIRELESS DEVICES	(56)	References Cited
		U.S. PATENT DOCUMENTS	
(71)	Applicant: InterDigital Patent Holdings, Inc., Wilmington, DE (US)	5,544,321 A	8/1996 Theimer et al.
		7,877,494 B2	1/2011 Carlton et al.
		8,200,365 B2 *	6/2012 Carlton et al. 455/509
(72)	Inventors: Alan G. Carlton, Minnetonka, MN (US); Alexander Reznik, Titusville, NJ (US)	8,478,207 B2 *	7/2013 Carlton et al. 455/73
		2006/0124762 A1	10/2006 Ozdamak
		2006/0129363 A1	12/2006 Corson
(73)	Assignee: InterDigital Patent Holdings, Inc., Wilmington, DE (US)	2007/0146347 A1	6/2007 Rosenberg
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		2011/0126237 A1	5/2011 Lee et al.
		2011/0138334 A1	6/2011 Jung
(21)	Appl. No.		
(22)	Filed:		
(65)	US 2013		
	Re		
(63)	Continua Jun. 11, continua Dec. 22,		
(60)	Provision 23, 2008		
(51)	Int. Cl. H04W 88		
(52)	U.S. Cl. USPC		
(58)	Field of USPC		
	See appl		

 US009173054B2			
(12) United States Patent Carlton et al.		(10) Patent No.:	US 9,173,054 B2
		(45) Date of Patent:	*Oct. 27, 2015
(54)	DATA TRANSFER BETWEEN WIRELESS DEVICES	(52)	U.S. CL. CPC <i>H04W 4/008</i> (2013.01); <i>G06F 3/0482</i> (2013.01); <i>G06F 3/0488</i> (2013.01); <i>H04L 6/716</i> (2013.01); <i>H04L 6/718</i> (2013.01); <i>H04W 4/02</i> (2013.01)
(71)	Applicant: InterDigital Patent Holdings, Inc. , Wilmington, DE (US)	(58)	Field of Classification Search CPC combination set(s) only. See application file for complete search history.
(72)	Inventors: Alan G. Carlton , Mineola, NY (US); Alexander Reznik , Titusville, NJ (US)	(56)	References Cited
(73)	Assignee: InterDigital Patent Holdings, Inc. , Wilmington, DE (US)	U.S. PATENT DOCUMENTS	
(*)	Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.	5,544,321 A 8/1996 Theimer et al. 7,813,097 B2 10/2010 McKillop 7,877,494 B2 1/2011 Carlton et al.	
(21)	Appl. No.	1. A method performed by a wireless communication device (WTRU), the method comprising: processing, by the WTRU from a to select media in an application; detecting, by the WTRU over bluetooth, by the WTRU, another display to select the another WTRU sending, by the WTRU to the selected message to transfer the selected receiving, by the WTRU, an accepted selected media; and transferring, by the WTRU to the selected over WiFi, the selected media.	
(22)	Filed:		
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(63)	Continuation of Jun. 28, 2011 continuation of Jun. 18, 2011 continuation of Dec. 22, 2010		
(60)	Provisional 23, 200		
(51)	Int. CL. <i>H04W 4/04</i> <i>H04W 4/04</i> <i>H04L 6/71</i> <i>G06F 3/04</i> <i>G06F 3/04</i>		

Microsoft Ignores Remaining Claim Limitations and the Patentable Combination



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(12) **United States Patent**
Carlton et al.

(10) **Patent No.:** US 8,737,933 B2
(45) **Date of Patent:** May 27, 2014

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
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(72) Inventors: **Alan G. Carlton**, Mineola, NY (US);
Alexander Reznik, Titusville, NJ (US)

(73) Assignee: **InterDigital Patent Holdings, Inc.**,
Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(56) **References Cited**
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1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:

processing, by the WTRU, a touchscreen input to select a media element;

detecting, by the WTRU using Bluetooth, a plurality of WTRUs in proximity to the WTRU;

processing, by the WTRU, another touchscreen input to select a WTRU of the plurality of WTRUs;

sending, by the WTRU, a message to transfer the selected media element to the selected WTRU;

receiving, by the WTRU, an acceptance to transfer the selected media element to the selected WTRU; and

transferring, by the WTRU using a WiFi communication, the selected media element to the selected WTRU.



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(10) **Patent No.:** US 9,173,054 B2
(45) **Date of Patent:** *Oct. 27, 2015

(54) **DATA TRANSFER BETWEEN WIRELESS DEVICES**

(71) Applicant: **InterDigital Patent Holdings, Inc.**,
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(52) **U.S. CL**
CPC *H04W 4/008* (2013.01); *G06F 3/0482* (2013.01); *G06F 3/0488* (2013.01); *H04L 67/16* (2013.01); *H04L 67/18* (2013.01); *H04W 4/02* (2013.01)

(58) **Field of Classification Search**
CPC combination set(s) only.
See application file for complete search history.

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5,544,321 A	8/1996	Thimer et al.	
7,813,697 B2	10/2010	McKillop	
7,877,494 B2	1/2011	Carlton et al.	

1. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:

processing, by the WTRU from a touch display, an input to select media in an application;

detecting, by the WTRU over bluetooth, another WTRU;

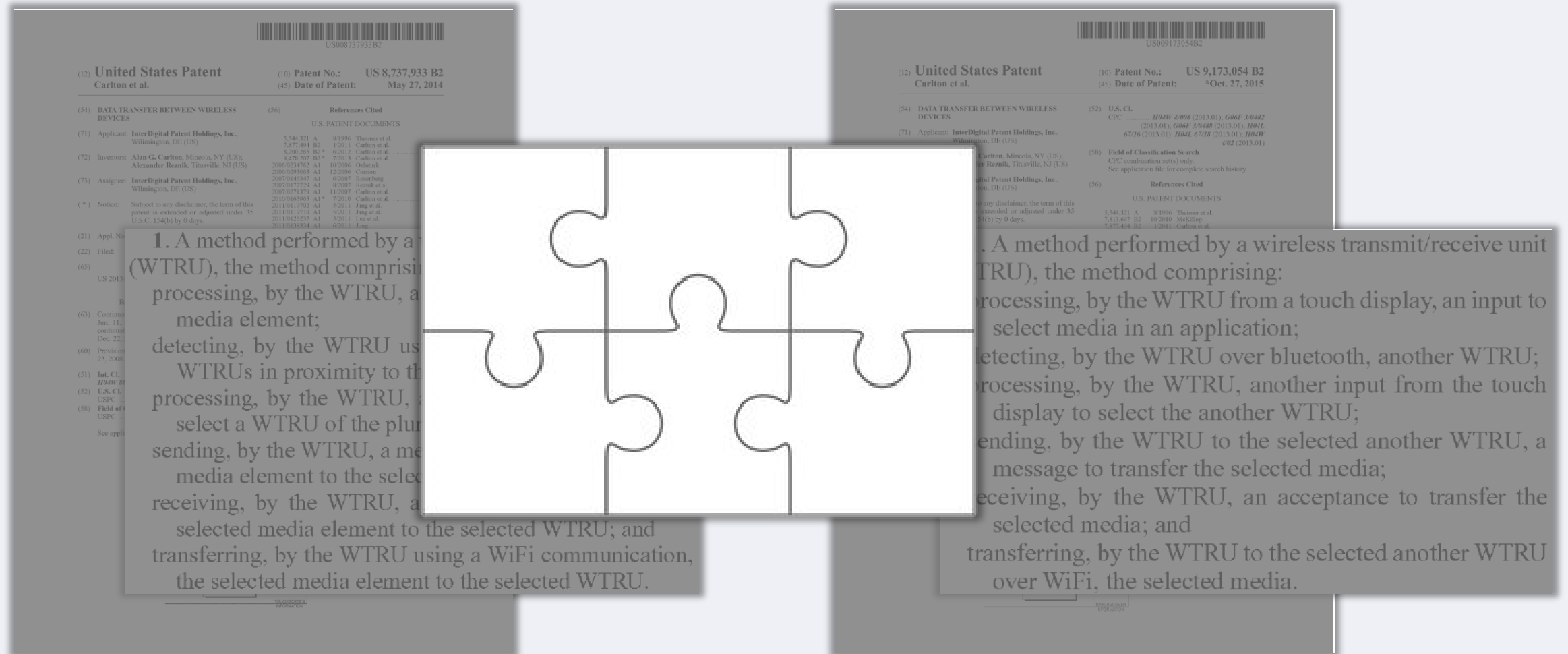
processing, by the WTRU, another input from the touch display to select the another WTRU;

sending, by the WTRU to the selected another WTRU, a message to transfer the selected media;

receiving, by the WTRU, an acceptance to transfer the selected media; and

transferring, by the WTRU to the selected another WTRU over WiFi, the selected media.

Microsoft Ignores Remaining Claim Limitations and the Patentable Combination



CONCLUSION

A PRESUMPTIVE NEXUS EXISTS BETWEEN THE CLAIMED INVENTION AND AIRDROP

- AirDrop embodies the claimed features because detection is done using Bluetooth.
- AirDrop is coextensive with the claims because the claimed invention is the heart of AirDrop's functionality.
- The evidence presented does not rebut the presumption of nexus between the Challenged Claims and AirDrop.

SECONDARY CONSIDERATIONS SHOW CHALLENGED CLAIMS ARE PATENTABLE

- The claimed invention was described before the release of AirDrop.
- Evidence of commercial success and industry praise show that the Challenged Claims are non-obvious.
- Evidence of copying and long-felt but unsolved need based on continuous attempts to replicate the success of AirDrop shows that the Challenged Claims are non-obvious.
- The claimed invention was not disclosed in the prior art.

See generally POR; Sur Reply