

Exhibit B

Claim Chart for U.S. Patent No. 9,832,708

The Accused Products include all Samsung-branded smartphones that support Samsung Pay/Samsung Wallet (“Samsung Pay”) and/or Google Pay/Google Wallet (“Google Pay”) and associated methods of using Samsung Pay and/or Google Pay. Based on the information presently available, Telcom is informed and believes that Samsung directly and indirectly infringes U.S. Patent No. 9,832,708 (the “’708 Patent”) as set forth herein. Samsung directly infringes claims 1-19 of the ’708 Patent when it makes, uses, sells, offers for sale, and/or imports the Accused Products. Samsung indirectly infringes claims 1-19 of the ’708 Patent by actively inducing direct infringement by its customers and end-users of the Accused Products.

When Samsung or its customers or end-users make, use, sell, offer for sale, or import the Accused Products capable of carrying out Samsung Pay and/or Google Pay functionality, the asserted apparatus claims are infringed. When Samsung or its customers or end-users use the Samsung Pay and/or Google Pay functionality in the Accused Products, the asserted method claims are infringed. Samsung and its customers and end-users commit acts of direct infringement when, for example, Samsung and its customers and end-users make, use (including testing), sell, offer for sale, or import the Accused Products. Samsung commits acts of indirect infringement when, for example, Samsung contributes to or induces its customers and end-users to infringe by, for example, making instructions available on Samsung’s and others’ websites, or otherwise providing documentation directly or indirectly to customers and end-users that instructs, describes, educates, encourages, and/or explains how to operate the Accused Products in an infringing manner, as shown, for example, by the exemplary documentation cited in this chart. By way of example, Samsung’s and its customers’ documentation instruct, describe, educate, encourage, and/or explain the use of the Accused Products in an infringing manner, including through the Samsung Pay and Google Pay functionality as claimed herein. The Accused Products include at least one component that constitutes a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of the patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. Samsung is therefore liable for all acts of direct infringement and indirect infringement of the patent.

Claim	Exemplary Infringement Analysis ¹
[1.p.] A method of operating a	The Accused Products are configured to use a method “of operating a smartphone using a first air interface and a second air interface that differs from the first air interface.”

¹ These infringement contentions are prepared with publicly available information. Telcom’s investigation is ongoing, and discovery has not yet begun. Telcom hereby incorporates by reference the cover pleading to which this claim chart is attached. Telcom reserves the right to seek leave of the Court to amend or

Claim	Exemplary Infringement Analysis ¹
smartphone using a first air interface and a second air interface that differs from the first air interface, the method comprising:	For example, operating a Samsung smartphone satisfies claim 1. Using Samsung Pay and/or Google Pay on a Samsung smartphone utilizes a first air interface (NFC) and a second air interface (a cellular data network or WiFi) that differs from the first air interface to conduct financial transactions.

supplement these contentions after further investigation and discovery from Samsung and non-parties. Such supplemental information may include, but is not limited to, design specifications, deposition testimony, testing information, reference designs, implementation and utilization information, source code, and/or schematics. Telcom also reserves the right to accuse different products or find alternative literal and/or equivalent infringing elements in Samsung's products based on further investigation and discovery or other circumstances. Any elements found not to be literally infringed are infringed under the doctrine of equivalents because the differences between the claimed inventions and the Accused Products, if any, are insubstantial. In addition, Samsung has not yet advised Telcom of any non-infringement arguments as to any claim or claim element. If and when Samsung does so, Telcom reserves the right to seek leave of the Court to address such arguments, including by providing any appropriate additional discussion pertaining to the application of the doctrine of equivalents with respect to Samsung's argument concerning non-infringement.

Claim	Exemplary Infringement Analysis ¹
	Galaxy Z Series Galaxy Z Fold6 Z Flip6 Galaxy Z Fold5 Z Flip5 Galaxy Z Fold4 Z Flip4 Galaxy Z Fold3 Z Flip3 5G Galaxy Z Fold2 5G* Galaxy Z Flip* Galaxy Fold* Galaxy Note Series Galaxy Note20 Note20 Ultra 5G* Galaxy Note10 Lite Galaxy Note10 Note10+* Galaxy Note9* Galaxy Note8* Galaxy Note Fan Edition* Galaxy Note5* Galaxy S Series Galaxy S24 S24+ S24 Ultra Galaxy S23 FE 5G Galaxy S23 S23+ S23 Ultra 5G Galaxy S22 S22+ S22 Ultra 5G Galaxy S21 FE 5G Galaxy S21 S21+ S21 Ultra 5G Galaxy S20 FE S20 FE 5G Galaxy S20 S20+ S20 Ultra* Galaxy S10 Lite Galaxy S10e S10 S10+* Galaxy S9 S9+* Galaxy S8 S8+* Galaxy S7 edge S7* Galaxy S6 edge+* See https://www.samsung.com/my/samsung-pay/supported-devices/

Claim	Exemplary Infringement Analysis ¹
	Fast, secure payments with Samsung Pay Samsung Pay allows you to tap to pay with your device anywhere NFC is available, making in-store payments quick and secure¹. You can also use Samsung Pay for in-app and online purchases at participating merchants, including Samsung.com. Learn more https://www.samsung.com/us/apps/samsung-wallet/ Settings > How to set up Google Pay All categories Change device All topics  1 Pay with ease using your Samsung Galaxy S10. Google Pay allows you to make payments for purchases you make in-store and online. Follow these steps to learn how to set up Google Pay. 2 Go to the Home screen. To open the menu, swipe up or down on the screen. 3 Choose Google Pay. Previous 1 / 23 Next https://www.t-mobile.com/support/tutorials/device/samsung/galaxy-s10/topic/settings/how-to-set-up-google-pay

Claim	Exemplary Infringement Analysis ¹
	 SAMSUNG Shop AI Mobile TV & Audio Appliances Computing Displays Accessories SmartThings Explore Support For Business How to use Google apps on your Galaxy phone or tablet Several different Google apps are available by default on your Galaxy phone and tablet, so you can start using them right away. For example, you can browse the web with Chrome, receive driving directions with Maps, and watch your favorite content with YouTube. Plus, you can download additional apps using the Google Play Store. Use Google apps The following Google apps may be preloaded on your device. If they aren't on your device, you can download them from the Google Play Store. To find your Google apps, swipe up on a Home screen to open the Apps screen, and then navigate to and tap the Google folder. • Play Store: This app is the gateway to thousands of apps and games that you can install on your device. • Chrome: Browse the Internet with the Chrome browser and bring your open tabs, bookmarks, and address bar data from your computer to your mobile device. • Drive: Open, view, rename, and share files saved to your Google Drive cloud account. • Meet/Duo: Make video calls with friends and family. • Gmail: Send and receive emails with Google's web-based email service. • Google: Find content online using a search engine that learns your interests. You can turn on your personalized feed to receive customized content as well. • Google Pay: Make purchases with your Android phone at participating stores and in mobile apps. • Google TV: Watch movies and TV shows purchased from Google Play using the Google TV app. You can also view videos saved on your device. • Maps: Get directions and other location-based information. You must enable location services to use Google Maps. • Photos: Store and backup your photos and videos automatically to your Google account with Google Photos. • Messages: Google's text messaging app supports chat features that let you send high quality pictures, videos, and text over Wi-Fi. • YouTube: Watch and upload YouTube videos right from your device. Recommended Articles Google services on Wear OS Galaxy watches Download apps from the Play Store Note: The Galaxy Store cannot be accessed on Wear OS models. All... Set up and use your Wear OS Galaxy Watch Galaxy Watch device compatibility for Wear OS models Note: The Galaxy Watch4 and Galaxy Watch5... Use Google Assistant on your Wear OS Galaxy watch Set up and use Google Assistant on your watch Note: Google Assistant works separately on the watch fro... Google services on Wear OS Galaxy watches The OS on the Galaxy Watch4, Watch5, and Watch6 series gives you access to Google services! These... https://www.samsung.com/us/support/answer/ANS10002548/

Claim	Exemplary Infringement Analysis ¹
	Set up tap to pay on your phone 2. Set Google Pay as your default payment app < Next: 3. Set up a screen lock >  Next, make sure Google Pay is set up as the payment default for your device.  1. On your Android device, open the Settings app. 2. In the search bar, type "NFC." 3. Tap NFC > Contactless payments > Payment default. 4. Select Google Pay. 5. Tap OK. Steps may differ depending on your device. https://support.google.com/wallet/answer/14187052?sjid=3604572701579461674-NA

Claim	Exemplary Infringement Analysis ¹
	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, <a data-bbox="1083 574 1325 599" href="#">you can find out more here. <a data-bbox="373 623 1577 656" href="https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/">https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17. 2021 Mobile data is an internet connection provided by a mobile network provider. You can <a data-bbox="373 1021 1913 1053" href="https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/">https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[1.a.] communicating between the smartphone and an entity using the first air	The Accused Products use a method that involves “communicating between the smartphone and an entity using the first air interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over a short-range link between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung

Claim	Exemplary Infringement Analysis ¹
interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over a short-range link between the smartphone and the entity;	smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes short-range communications between the Samsung smartphone and an entity such as a point-of-sale terminal using a first air interface, NFC. The communicating is responsive to the proximity criterion having been satisfied between the smartphone and the entity. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[1.b.] refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity	The Accused Products use a method that involves “refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes refraining from communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) absent the proximity criterion having been satisfied between the Samsung smartphone and the point-of-sale terminal (the entity).

Claim	Exemplary Infringement Analysis ¹
criterion having been satisfied between the smartphone and the entity; and	NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

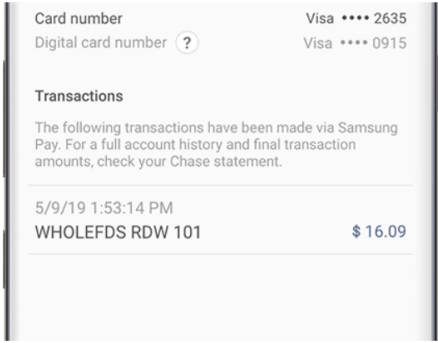
Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[1.c.] communicating between the smartphone and a base station using the second air interface to receive a communications service from the base station via	The Accused Products use a method that involves “communicating between the smartphone and a base station using the second air interface to receive a communications service from the base station via the second air interface, wherein the smartphone receives the communications service from the base station via the second air interface but does not receive the communications service from the entity via the first air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the Samsung smartphone and a base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the cellular data network or WiFi. The Samsung smartphone does not receive the communications service from the point-of-sale terminal (the entity) via NFC (the first air interface).

Claim	Exemplary Infringement Analysis ¹
the second air interface, wherein the smartphone receives the communications service from the base station via the second air interface but does not receive the communications service from the entity via the first air interface,	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here.
	https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can
	https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does no emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.

Claim	Exemplary Infringement Analysis ¹
[1.d.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over the short-range link between the smartphone and the entity is performed concurrently with the communicating between the smartphone and the base station using the second air interface to receive a	The Accused Products use a method that involves “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over the short-range link between the smartphone and the entity is performed concurrently with the communicating between the smartphone and the base station using the second air interface to receive a communications service from the base station via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed concurrently with the Samsung smartphone communicating with the base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the second air interface. What kind of data do we collect and use? As described in the Samsung Privacy Policy, in addition to your Samsung Account information and other PII described in this Privacy Notice, we also collect (including from you and/or other parties such as your card issuer/bank and payment network) information regarding your use of the Samsung Pay application. This information includes technical information such as unique device identifier, GUID identifier created as part of your Samsung Account, card issuer, card brand, device model, transaction date and time, whether an MST or NFC based transaction was used, card enrollment status, and whether a transaction successfully went through. Please note that we do not collect any transaction information that can be linked to you such as what you purchased, how much you spent or where you made your purchase. We may however collect, strictly on an aggregated anonymous basis only, transaction information such as amount, merchant name and location. Any such aggregated anonymous transaction information collected cannot be linked back to you or your Mobile Device in any way. https://images.samsung.com/is/content/samsung/p5/ae/samsungpay/images/privacy_notice.pdf

Claim	Exemplary Infringement Analysis ¹
communications service from the base station via the second air interface.	View recent transactions Note: You can only view transactions made with the Samsung Pay app. If you are looking for details about purchases made on Samsung.com or the Shop Samsung app, you can see them in your account. Did you pay the cable bill already? If you aren't sure, just take a look at your recent transactions. Open Samsung Pay on your phone. Tap Menu in the upper left corner, and then tap Cards. Select your desired payment card, and then swipe up to see up to a month's worth of recent transactions and purchases made with the Samsung Pay app.  https://www.samsung.com/us/support/answer/ANS00044981/

Claim	Exemplary Infringement Analysis ¹
	Data use for more helpful Google products & services Activity data allows for more helpful products & services The activity data saved in your Google Account provides helpful and personalized experiences in Google products, such as faster searching and automatic recommendations. At any time, you can control what activity gets saved to your account, download your data, or delete your activity. Data also helps us: • Make sure our services work as intended. • Monitor outages or troubleshooting issues that you report to us. • Make improvements to our services. For example, knowledge of which search terms are often misspelled helps us improve spell-check features used across our services. https://support.google.com/googlepay/answer/10400210?hl=en

View transaction history

1. Open Google Pay .
2. Under "Manage your Money," click **See transaction history**.
3. Here, you can click on any transaction to see the detailed transaction page.

Troubleshoot to check your previous transaction history

Your transaction history only contains those made through Google Pay and not all UPI or banking transactions. If you can't view your Google Pay transaction history, do the next steps.

Step 1: Update Google Pay

To check for updates, go to the Play Store or App Store.

Step 2: Check email address for Google Pay

If you registered more than one email address for your Google Pay account, go through the email selection steps again.

1. Open Google Pay .
2. Select your preferred language.
3. Enter your 10 digit phone number.
4. To accept all in-app permissions, tap **Allow**.
5. Enter the Google account registered to your mobile device and tap **Continue**. **Tip:** You can also add a new Google account.
6. To secure your Google Pay app , select **Use screen lock** or **Use Google PIN**.
Tip: Under screen lock, you can choose pattern lock, fingerprint sensor, or passcode.
7. Add a bank account.

If you used only one email address to register a Google Pay account, wait for 3 to 4 hours then try to check your transaction history again. If you can't check it, it can be due to poor cellular reception or network coverage.

Claim	Exemplary Infringement Analysis ¹
	https://support.google.com/pay/india/answer/7430307?hl=en#:~:text=View%20transaction%20history%201%20Open%20Google%20Pay%20.,any%20transaction%20to%20see%20the%20detailed%20transaction%20page. Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[2.] The method according to claim 1, further comprising detecting that the proximity criterion between the smartphone and the entity is satisfied.	The Accused Products use a method that includes “further comprising detecting that the proximity criterion between the smartphone and the entity is satisfied.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes detecting that a proximity criterion (using NFC) between the Samsung smartphone and an entity such as a point-of-sale terminal is satisfied. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[3.a.] The method according to claim 2, wherein the detecting comprises: detecting that a proximity criterion of less than 10 meters in distance is	The Accused Products use a method that includes “wherein the detecting comprises: detecting that a proximity criterion of less than 10 meters in distance is satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes detecting that a proximity criterion of less than 10 meters in distance is satisfied between the smartphone and the entity (the point-of-sale terminal).

Claim	Exemplary Infringement Analysis ¹
satisfied between the smartphone and the entity,	Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telecom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[3.b.] wherein the detecting is performed by the smartphone, by a device that is associated with the entity, and/or by a system that is	The Accused Products use a method that includes “wherein the detecting is performed by the smartphone, by a device that is associated with the entity, and/or by a system that is associated with the smartphone.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes detecting (through NFC) that the proximity criterion is satisfied, which is performed by a device that is associated with the entity, and/or by a system that is associated with the Samsung smartphone.

Claim	Exemplary Infringement Analysis ¹
associated with the smartphone.	Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[4.a.] The method	The Accused Products use a method “wherein the entity comprises a first device, wherein the information provided to the entity comprises a first information, and wherein the method further comprises: selectively sending, by the smartphone,

Claim	Exemplary Infringement Analysis ¹
according to claim 1, wherein the entity comprises a first device, wherein the information provided to the entity comprises a first information, and wherein the method further comprises: selectively sending, by the smartphone, second information to a second device and receiving, by the smartphone, third information from the second device responsive to the proximity criterion having been satisfied between the	second information to a second device and receiving, by the smartphone, third information from the second device responsive to the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes the entity (a point-of-sale terminal) as a first device and the information provided to the entity is a first information (e.g., a transaction-specific dynamic digital token). Using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay further includes selectively sending, by the smartphone, second information (e.g., a second transaction-specific dynamic digital token) to a second device (a second point-of-sale terminal) and receiving, by the smartphone, third information (e.g., confirmation of the transaction) from the second device responsive to the proximity criterion having been satisfied between the smartphone and the entity. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. Will I receive a receipt after making a purchase with Samsung Pay? When paying with Samsung Pay you will receive a receipt for your purchases just as you would with a physical card. You will receive a notification confirmation about your transaction, but you will not receive a separate physical or digital receipt from Samsung Pay. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
smartphone and the entity,	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en#

Claim	Exemplary Infringement Analysis ¹
	What device tokens are When you pay for something with a physical card — credit, debit or prepaid — the merchant usually charges you through the printed number on the front of your card, known as the Funding Primary Account Number (FPAN). Every time this happens, you provide that number to the merchant, and that number is then sent along to a handful of other parties like the merchant’s bank, the card network (an organization that facilitates transactions between banks and merchants), the payment service provider and more. In contrast, Google Wallet creates a device-specific virtual account number, or device token, for each payment method you add, so your real card number isn’t stored on your device or shared with merchants. Thanks to this tokenization, the only parties who have your actual FPAN when you make a purchase are the bank that issued the card and the card network. What’s more, your device token functions independently from your physical card. It’s linked to your bank account or line of credit, not the card itself. So you can think of a device token as a super-safe messenger between your bank account or line of credit and whoever you’re buying something from. https://blog.google/products/google-pay/device-tokens-google-wallet/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[4.b.] wherein the smartphone does not receive the communications service from the second device.	The Accused Products use a method “wherein the smartphone does not receive the communications service from the second device.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, Samsung smartphones receive the communications service from the base station and not the second device (the second point-of-sale terminal).

Claim	Exemplary Infringement Analysis ¹
	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does not emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[5.] The method according to claim 1, wherein the communicating, over the short-range link,	The Accused Products use a method “wherein the communicating, over the short-range link, between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the

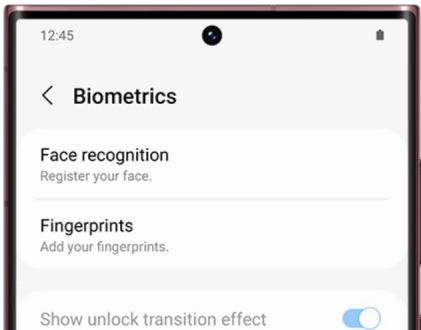
Claim	Exemplary Infringement Analysis ¹
between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.	Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed over a point-to-point short-range link between the Samsung smartphone and the point-of-sale terminal using a time division duplex protocol. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en NFC uses a time division duplex protocol. How Does Near-Field Communication Work? Near-field communication is a wireless connectivity technology that is based on RFID. It uses induction coupling to enable communication between two compatible devices that are close. It enables users to automatically transfer data bi-directionally between two NFC-enabled devices by just touching both of them or by bringing them close to each other. NFC operates at the globally unlicensed 13.56 MHz frequency. It has three different data transfer rates – i.e., 212 kbit/s, 106 kbit/s, and 424 kbit/s.

Claim	Exemplary Infringement Analysis ¹
	https://www.spiceworks.com/tech/networking/articles/what-is-near-field-communication/ NFC is a short-range half duplex communication technology which provide secure communication between devices in near field region. Near field communication, is a technology that allows two devices in close range to securely exchange data wirelessly. NFC is a short-range (< 10 cm) wireless connectivity technology that operates at high frequency (HF) range with low bandwidth of radio waves, mainly at 13.56 MHz [13]. NFC comprises of three basic components - an antenna, a reader, and a tag. A reader (transmitter) sends a https://www.intechopen.com/chapters/75600 What Does Time Division Duplex Mean? Time division duplex (TDD) refers to duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band. It is a transmission scheme that allows asymmetric flow for uplink and downlink data transmission. Users are allocated time slots for uplink and downlink transmission. Time division multiplexing separates uplink and downlink signals by matching full duplex communication over a half-duplex communication link. This method is highly advantageous in case there is an asymmetry of uplink and downlink data rates. TDD divides a data stream into frames and assigns different time slots to forward and reverse transmissions, thereby allowing both types of transmissions to share the same transmission medium. https://www.techopedia.com/definition/27019/time-division-duplex-tdd Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[6.] The method of claim 1, further comprising enabling a	The Accused Products use a method that includes “enabling a function by the smartphone in response to an identity, wherein the identity is communicated between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung

Claim	Exemplary Infringement Analysis ¹
function by the smartphone in response to an identity, wherein the identity is communicated between the smartphone and the entity.	smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes enabling a function by the Samsung smartphone or application (e.g., unlocking) in response to an identity (the identity of the user), wherein the identity is communicated between the smartphone and the entity (point-of-sale terminal). Face recognition lets you unlock your phone in one quick move. To use Face Recognition, follow these steps: 1 Tap Settings  https://www.samsung.com/sg/support/mobile-devices/how-to-use-face-recognition-to-unlock-samsung-mobile-device/

Claim	Exemplary Infringement Analysis ¹
	Set up and use fingerprint unlock  It's time to set up fingerprint security and register your prints. The steps will be almost exactly the same, no matter what device you have. The only difference will be where the fingerprint sensor is located. 1 Navigate to Settings, then tap Security and privacy, and then tap Biometrics. Tap Fingerprints. 2 Enter your lock screen credentials. If you do not have a screen lock set up, you may be prompted to create one at this point. When you're ready, read the information, and then tap Continue. 3 Tap Register, and then use the on-screen prompts to register your fingerprint. When registering your fingerprint, make sure to fully cover the fingerprint sensor with your finger to prevent strong light from entering the fingerprint sensor. When you're finished, tap Done. 4 Next, make sure that the switch next to Fingerprint unlock is turned on. Note: If the fingerprint sensor on your device is located on the Side key or below the Side key, you can disable the "Fingerprint always on" option to prevent accidental unlocks. 5 To unlock your device using your finger, tap the screen or press the Power button or Side button. Then, place the registered finger on the fingerprint scanner, wherever it's located. The device will automatically unlock if it recognizes your fingerprint. https://www.samsung.com/us/support/answer/ANS10001613/

Claim	Exemplary Infringement Analysis ¹
	Set up Facial recognition Note: To use Face recognition, you need to set a PIN, Pattern, or Password first. Your face is unique to you, which makes it one of the best security features in your arsenal. 1. From Settings, swipe to and tap Security and privacy, and then tap Biometrics. 2. Tap Face recognition, and then enter your PIN or password. If you do not already have a secure screen lock, you will need to set one up. 3. Tap Continue, and then hold the phone 8-20 inches away as you position your face inside the circle. Hold the position until the progress bar reaches 100%. You may be prompted to remove your glasses to finish the process. 4. When you're done, adjust your desired settings.  https://www.samsung.com/us/support/answer/ANS00062630/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction.

Claim	Exemplary Infringement Analysis ¹
	What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. https://www.samsung.com/uk/samsung-pay/faq/ Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en#

Claim	Exemplary Infringement Analysis ¹
	What device tokens are When you pay for something with a physical card — credit, debit or prepaid — the merchant usually charges you through the printed number on the front of your card, known as the Funding Primary Account Number (FPAN). Every time this happens, you provide that number to the merchant, and that number is then sent along to a handful of other parties like the merchant’s bank, the card network (an organization that facilitates transactions between banks and merchants), the payment service provider and more. In contrast, Google Wallet creates a device-specific virtual account number, or device token, for each payment method you add, so your real card number isn’t stored on your device or shared with merchants. Thanks to this tokenization, the only parties who have your actual FPAN when you make a purchase are the bank that issued the card and the card network. What’s more, your device token functions independently from your physical card. It’s linked to your bank account or line of credit, not the card itself. So you can think of a device token as a super-safe messenger between your bank account or line of credit and whoever you’re buying something from. https://blog.google/products/google-pay/device-tokens-google-wallet/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telecom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[7.] The method of claim 6, wherein the enabling the function is performed in response to	The Accused Products use a method “wherein the enabling the function is performed in response to comparing the identity with one or more identities.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes enabling the function (e.g.,

Claim	Exemplary Infringement Analysis ¹
comparing the identity with one or more identities.	unlocking the Samsung smartphone or application) in response to comparing the identity with one or more identities (e.g., identities not associated with the authorized user of the smartphone). How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en#

Claim	Exemplary Infringement Analysis ¹
	What device tokens are When you pay for something with a physical card — credit, debit or prepaid — the merchant usually charges you through the printed number on the front of your card, known as the Funding Primary Account Number (FPAN). Every time this happens, you provide that number to the merchant, and that number is then sent along to a handful of other parties like the merchant’s bank, the card network (an organization that facilitates transactions between banks and merchants), the payment service provider and more. In contrast, Google Wallet creates a device-specific virtual account number, or device token, for each payment method you add, so your real card number isn’t stored on your device or shared with merchants. Thanks to this tokenization, the only parties who have your actual FPAN when you make a purchase are the bank that issued the card and the card network. What’s more, your device token functions independently from your physical card. It’s linked to your bank account or line of credit, not the card itself. So you can think of a device token as a super-safe messenger between your bank account or line of credit and whoever you’re buying something from. https://blog.google/products/google-pay/device-tokens-google-wallet/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[8.] The method of claim 6, further comprising establishing the short-range link between the smartphone and the entity in	The Accused Products use a method that includes “establishing the short-range link between the smartphone and the entity in further response to the identity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes establishing the short-range link between the Samsung smartphone and the entity (point-of-sale terminal) in further response to the identity.

Claim	Exemplary Infringement Analysis ¹
further response to the identity.	How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en# Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[9.] The method of claim 1,	The Accused Products use a method that includes “providing a notification at the smartphone in response to receiving a signal from the entity.”

Claim	Exemplary Infringement Analysis ¹
further comprising providing a notification at the smartphone in response to receiving a signal from the entity.	On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes providing at least a confirmation notification at the smartphone in response to receiving a signal from the entity (the point-of-sale terminal). Will I receive a receipt after making a purchase with Samsung Pay? When paying with Samsung Pay you will receive a receipt for your purchases just as you would with a physical card. You will receive a notification confirmation about your transaction, but you will not receive a separate physical or digital receipt from Samsung Pay. https://www.samsung.com/uk/samsung-pay/faq/ Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[10.] The method of claim 1, wherein the entity comprises a first device to which the smartphone provides the information over the short-range link, and wherein the method further comprises sending the information to a second device responsive to the proximity criterion having been satisfied between the smartphone and the entity.	The Accused Products use a method “wherein the entity comprises a first device to which the smartphone provides the information over the short-range link, and wherein the method further comprises sending the information to a second device responsive to the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes providing information (a transaction-specific dynamic digital token) to a first device (the entity such as a point-of-sale terminal) over the short-range link (NFC) and sending the information to a second device (a base station) responsive to the proximity criterion having been satisfied between the Samsung smartphone and the entity (the point-of-sale terminal). How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. https://www.samsung.com/uk/samsung-pay/faq/

When you make a payment

When you make a payment, you will need to authenticate your identity by using your fingerprint or Samsung Pay PIN before the information can be sent to the payment terminal. The merchant will only receive a token, and your payment information will be kept secure. The token will be sent to the payment network, where it will be decrypted and verified against the information stored in a secure vault on internal networks. Once authenticated, the payment will be approved and sent back to the merchant. Only the payment network and your bank will have information about the transaction.

<https://www.samsung.com/us/support/answer/ANS00043932/>

Claim	Exemplary Infringement Analysis ¹
	Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en#

Claim	Exemplary Infringement Analysis ¹
	What device tokens are When you pay for something with a physical card — credit, debit or prepaid — the merchant usually charges you through the printed number on the front of your card, known as the Funding Primary Account Number (FPAN). Every time this happens, you provide that number to the merchant, and that number is then sent along to a handful of other parties like the merchant's bank, the card network (an organization that facilitates transactions between banks and merchants), the payment service provider and more. In contrast, Google Wallet creates a device-specific virtual account number, or device token, for each payment method you add, so your real card number isn't stored on your device or shared with merchants. Thanks to this tokenization, the only parties who have your actual FPAN when you make a purchase are the bank that issued the card and the card network. What's more, your device token functions independently from your physical card. It's linked to your bank account or line of credit, not the card itself. So you can think of a device token as a super-safe messenger between your bank account or line of credit and whoever you're buying something from. https://blog.google/products/google-pay/device-tokens-google-wallet/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[11.p.] A smartphone comprising:	The Accused Products are smartphones. For example, a Samsung smartphone that conducts financial transactions via Samsung Pay and/or Google Pay satisfies claim 11.

Claim	Exemplary Infringement Analysis ¹
	Galaxy Z Series Galaxy Z Fold6 Z Flip6 Galaxy Z Fold5 Z Flip5 Galaxy Z Fold4 Z Flip4 Galaxy Z Fold3 Z Flip3 5G Galaxy Z Fold2 5G* Galaxy Z Flip* Galaxy Fold* Galaxy Note Series Galaxy Note20 Note20 Ultra 5G* Galaxy Note10 Lite Galaxy Note10 Note10+* Galaxy Note9* Galaxy Note8* Galaxy Note Fan Edition* Galaxy Note5* Galaxy S Series Galaxy S24 S24+ S24 Ultra Galaxy S23 FE 5G Galaxy S23 S23+ S23 Ultra 5G Galaxy S22 S22+ S22 Ultra 5G Galaxy S21 FE 5G Galaxy S21 S21+ S21 Ultra 5G Galaxy S20 FE S20 FE 5G Galaxy S20 S20+ S20 Ultra* Galaxy S10 Lite Galaxy S10e S10 S10+* Galaxy S9 S9+* Galaxy S8 S8+* Galaxy S7 edge S7* Galaxy S6 edge+* See https://www.samsung.com/my/samsung-pay/supported-devices/

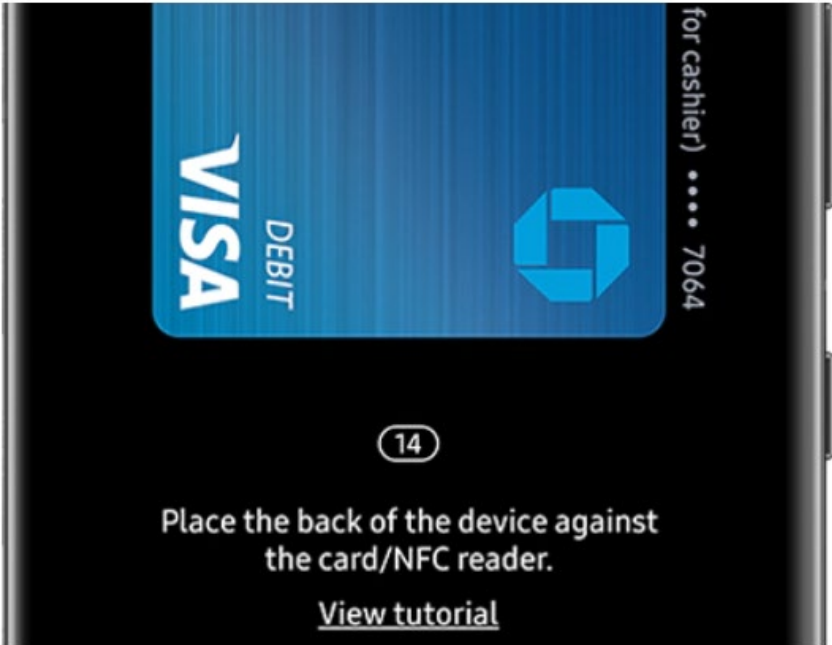
Claim	Exemplary Infringement Analysis ¹				
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.				
[11.a.] a processor that is configured to control the smartphone to perform operations comprising:	The Accused Products include “a processor that is configured to control the smartphone to perform operations.” For example, a Samsung smartphone has a processor. In one example, the Samsung Exynos processors are configured to control the Galaxy S22 Ultra to perform operations. As another example, Samsung utilizes Qualcomm® Snapdragon® processors in its Galaxy S24 Plus smartphones. Smartphone Samsung Exynos processors for smartphone is designed to deliver a superior experience with powerful performance, energy efficiency, and fast internet connection. Galaxy S22 Ultra Exynos 2200 https://semiconductor.samsung.com/processor/showcase/ Processor <table data-bbox="422 1068 1900 1248"> <tr> <td data-bbox="422 1068 1117 1157">Chipset</td><td data-bbox="1117 1068 1900 1157">Qualcomm® Snapdragon® 8 Gen 3 for Galaxy</td></tr> <tr> <td data-bbox="422 1157 1117 1248">Cores</td><td data-bbox="1117 1157 1900 1248">Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz</td></tr> </table> https://www.att.com/buy/phones/samsung-galaxy-s24plus.html	Chipset	Qualcomm® Snapdragon® 8 Gen 3 for Galaxy	Cores	Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz
Chipset	Qualcomm® Snapdragon® 8 Gen 3 for Galaxy				
Cores	Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz				

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[11.b.] communicating between the smartphone and an entity using a first air interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over a short-range link between the smartphone and the entity;	The Accused Products are configured for “communicating between the smartphone and an entity using a first air interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over a short-range link between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including short-range communicating between the Samsung smartphone and an entity such as a point-of-sale terminal using a first air interface, NFC. The communicating is responsive to a proximity criterion having been satisfied between the smartphone and the entity. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	 https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[11.c.] refraining from communicating between the smartphone and the entity by the smartphone using the first air interface	The Accused Products are configured for “refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including refraining from communicating between the Samsung smartphone and the point-of-sale terminal using NFC (the first air

Claim	Exemplary Infringement Analysis ¹
absent the proximity criterion having been satisfied between the smartphone and the entity; and	interface) absent the proximity criterion having been satisfied between the Samsung smartphone and the point-of-sale terminal (the entity). NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	 https://www.samsung.com/us/support/answer/ANS00045102/

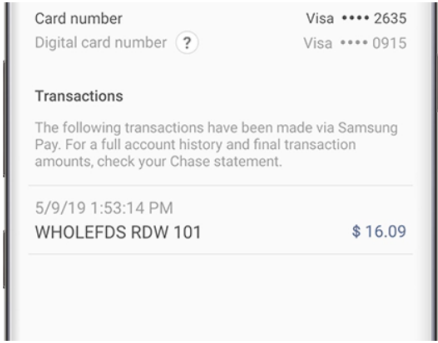
Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[11.d.] communicating between the smartphone and a base station using a second air interface to receive a communications service from the base station via	The Accused Products are configured for “communicating between the smartphone and a base station using a second air interface to receive a communications service from the base station via the second air interface, wherein the smartphone receives the communications service from the base station via the second air interface but does not receive the communications service from the entity via the first air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including communicating between the Samsung smartphone and a base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the cellular data network or WiFi. The Samsung

Claim	Exemplary Infringement Analysis ¹
the second air interface, wherein the smartphone receives the communications service from the base station via the second air interface but does not receive the communications service from the entity via the first air interface,	smartphone does not receive the communications service from the point-of-sale terminal (the entity) via NFC (the first air interface). What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does no emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.

Claim	Exemplary Infringement Analysis ¹
[11.e.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over the short-range link between the smartphone and the entity is performed concurrently with the communicating between the smartphone and the base station using the second air interface to receive a	The Accused Products are configured to perform operations including “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity over the short-range link between the smartphone and the entity is performed concurrently with the communicating between the smartphone and the base station using the second air interface to receive a communications service from the base station via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, when conducting financial transactions via Samsung Pay and/or Google Pay, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to communicate with the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed concurrently with the Samsung smartphone communicating with the base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the second air interface. What kind of data do we collect and use? As described in the Samsung Privacy Policy, in addition to your Samsung Account information and other PII described in this Privacy Notice, we also collect (including from you and/or other parties such as your card issuer/bank and payment network) information regarding your use of the Samsung Pay application. This information includes technical information such as unique device identifier, GUID identifier created as part of your Samsung Account, card issuer, card brand, device model, transaction date and time, whether an MST or NFC based transaction was used, card enrollment status, and whether a transaction successfully went through. Please note that we do not collect any transaction information that can be linked to you such as what you purchased, how much you spent or where you made your purchase. We may however collect, strictly on an aggregated anonymous basis only, transaction information such as amount, merchant name and location. Any such aggregated anonymous transaction information collected cannot be linked back to you or your Mobile Device in any way. https://images.samsung.com/is/content/samsung/p5/ae/samsungpay/images/privacy_notice.pdf

Claim	Exemplary Infringement Analysis ¹
communications service from the base station via the second air interface.	View recent transactions Note: You can only view transactions made with the Samsung Pay app. If you are looking for details about purchases made on Samsung.com or the Shop Samsung app, you can see them in your account. Did you pay the cable bill already? If you aren't sure, just take a look at your recent transactions. Open Samsung Pay on your phone. Tap Menu in the upper left corner, and then tap Cards. Select your desired payment card, and then swipe up to see up to a month's worth of recent transactions and purchases made with the Samsung Pay app.  https://www.samsung.com/us/support/answer/ANS00044981/

View transaction history

1. Open Google Pay .
2. Under "Manage your Money," click **See transaction history**.
3. Here, you can click on any transaction to see the detailed transaction page.

Troubleshoot to check your previous transaction history

Your transaction history only contains those made through Google Pay and not all UPI or banking transactions. If you can't view your Google Pay transaction history, do the next steps.

Step 1: Update Google Pay

To check for updates, go to the Play Store or App Store.

Step 2: Check email address for Google Pay

If you registered more than one email address for your Google Pay account, go through the email selection steps again.

1. Open Google Pay .
2. Select your preferred language.
3. Enter your 10 digit phone number.
4. To accept all in-app permissions, tap **Allow**.
5. Enter the Google account registered to your mobile device and tap **Continue**. **Tip:** You can also add a new Google account.
6. To secure your Google Pay app , select **Use screen lock** or **Use Google PIN**.
Tip: Under screen lock, you can choose pattern lock, fingerprint sensor, or passcode.
7. Add a bank account.

If you used only one email address to register a Google Pay account, wait for 3 to 4 hours then try to check your transaction history again. If you can't check it, it can be due to poor cellular reception or network coverage.

Claim	Exemplary Infringement Analysis ¹
	https://support.google.com/pay/india/answer/7430307?hl=en#:~:text=View%20transaction%20history%201%20Open%20Google%20Pay%20.,any%20transaction%20to%20see%20the%20detailed%20transaction%20page Data use for more helpful Google products & services Activity data allows for more helpful products & services The activity data saved in your Google Account provides helpful and personalized experiences in Google products, such as faster searching and automatic recommendations. At any time, you can control what activity gets saved to your account, download your data, or delete your activity. Data also helps us: • Make sure our services work as intended. • Monitor outages or troubleshooting issues that you report to us. • Make improvements to our services. For example, knowledge of which search terms are often misspelled helps us improve spell-check features used across our services. https://support.google.com/googlepay/answer/10400210?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[12.] The smartphone according to claim 11, wherein the operations	The Accused Products engage in operations that comprise “wherein the operations further comprise detecting that the proximity criterion between the smartphone and entity is satisfied.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations

Claim	Exemplary Infringement Analysis ¹
further comprise detecting that the proximity criterion between the smartphone and entity is satisfied.	including detecting that a proximity criterion (using NFC) between the Samsung smartphone and an entity such as a point-of-sale terminal is satisfied. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[13.a.] The smartphone according to claim 12, wherein the detecting comprises: detecting that a proximity criterion of less than 10 meters	The Accused Products engage in operations that comprise “wherein the detecting comprises: detecting that a proximity criterion of less than 10 meters in distance is satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including detecting that a proximity criterion of less than 10 meters in distance is satisfied between the smartphone and the entity (the point-of-sale terminal).

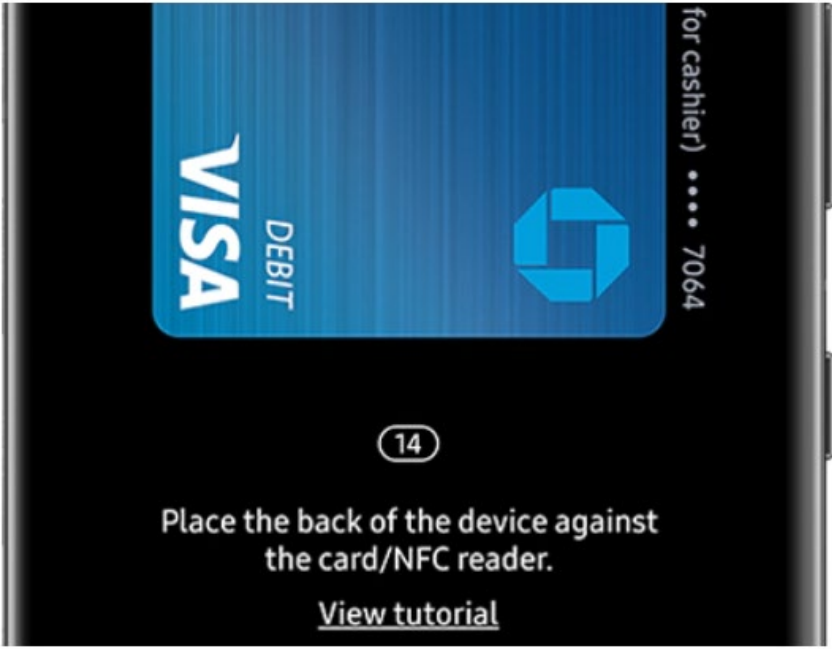
Claim	Exemplary Infringement Analysis ¹
in distance is satisfied between the smartphone and the entity,	Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[13.b.] wherein the detecting is performed by the smartphone, by a device that is associated with the entity, and/or by a system that is associated with the smartphone.	The Accused Products engage in operations that include “wherein the detecting is performed by the smartphone, by a device that is associated with the entity, and/or by a system that is associated with the smartphone.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including detecting (through NFC) that the proximity criterion is satisfied, which is performed by a device that is associated with the entity, and/or by a system that is associated with the Samsung smartphone.

Claim	Exemplary Infringement Analysis ¹
	Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	 https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[14.a.] The smartphone according to claim 11, wherein the entity comprises a first device, wherein the information provided to the	The Accused Products engage in operations “wherein the entity comprises a first device, wherein the information provided to the entity comprises a first information, and wherein the method further comprises: selectively sending, by the smartphone, second information to a second device and receiving, by the smartphone, third information from the second device responsive to the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operation including wherein the entity (a point-of-sale terminal) as a first device and the information provided to the entity is a first information (e.g., a transaction-specific dynamic digital token). A Samsung smartphone conducting financial transactions via Samsung Pay

Claim	Exemplary Infringement Analysis ¹
entity comprises a first information, and wherein the method further comprises: selectively sending, by the smartphone, second information to a second device and receiving, by the smartphone, third information from the second device responsive to the proximity criterion having been satisfied between the smartphone and the entity,	and/or Google Pay is further configured to perform operations including selectively sending, by the smartphone, second information (e.g., a second transaction-specific dynamic digital token) to a second device (a second point-of-sale terminal) and receiving, by the smartphone, third information (e.g., confirmation of the transaction) from the second device responsive to the proximity criterion having been satisfied between the smartphone and the entity. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. What is Tokenization? Samsung Pay uses network tokenization technology that replaces your real card details with a dynamic digital token that is transmitted instead of your physical card's number. So your transactions remain secure, and your shopping stays safe. Will I receive a receipt after making a purchase with Samsung Pay? When paying with Samsung Pay you will receive a receipt for your purchases just as you would with a physical card. You will receive a notification confirmation about your transaction, but you will not receive a separate physical or digital receipt from Samsung Pay. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Pay in a store Step 1: Wake up & unlock your phone Important: For users with a Pixel 7 or Pixel 7 Pro, Face Unlock is currently not supported for tap to pay transactions. Turn on your screen, then unlock your phone. You don't need to open the Google Wallet app. Tip: In most countries or regions, smaller transactions don't require you to unlock your phone. Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. Step 3: If prompted, follow the on-screen instructions Some stores ask for a PIN or signature. If you're asked, follow the steps on the screen. • Debit cards: Enter the PIN that you set up with your bank. This PIN is different from the one you use to unlock your device. • Credit cards: For larger transactions, sign the receipt or the on-screen signature box. https://support.google.com/wallet/answer/12060043?hl=en#

Claim	Exemplary Infringement Analysis ¹
	What device tokens are When you pay for something with a physical card — credit, debit or prepaid — the merchant usually charges you through the printed number on the front of your card, known as the Funding Primary Account Number (FPAN). Every time this happens, you provide that number to the merchant, and that number is then sent along to a handful of other parties like the merchant’s bank, the card network (an organization that facilitates transactions between banks and merchants), the payment service provider and more. In contrast, Google Wallet creates a device-specific virtual account number, or device token, for each payment method you add, so your real card number isn’t stored on your device or shared with merchants. Thanks to this tokenization, the only parties who have your actual FPAN when you make a purchase are the bank that issued the card and the card network. What’s more, your device token functions independently from your physical card. It’s linked to your bank account or line of credit, not the card itself. So you can think of a device token as a super-safe messenger between your bank account or line of credit and whoever you’re buying something from. https://blog.google/products/google-pay/device-tokens-google-wallet/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[14.b.] wherein the smartphone does not receive the communications service from the second device.	The Accused Products engage in operations “wherein the smartphone does not receive the communications service from the second device.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, Samsung smartphones receive the communications service from the base station and not the second device (the second point-of-sale terminal).

Claim	Exemplary Infringement Analysis ¹
	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov 17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does not emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html

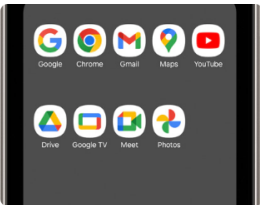
Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[15.] The smartphone according to claim 11, wherein the communicating, over the short-range link, between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.	The Accused Products engage in operations “wherein the communicating, over the short-range link, between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed over a point-to-point short-range link between the Samsung smartphone and the point-of-sale terminal using a time division duplex protocol. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en How Does Near-Field Communication Work? Near-field communication is a wireless connectivity technology that is based on RFID. It uses induction coupling to enable communication between two compatible devices that are close. It enables users to automatically transfer data bi-directionally between two NFC-enabled devices by just touching both of them or by bringing them close to each other. NFC operates at the globally unlicensed 13.56 MHz frequency. It has three different data transfer rates – i.e., 212 kbit/s, 106 kbit/s, and 424 kbit/s. https://www.spiceworks.com/tech/networking/articles/what-is-near-field-communication/

Claim	Exemplary Infringement Analysis ¹
	NFC is a short-range half duplex communication technology which provide secure communication between devices in near field region. Near field communication, is a technology that allows two devices in close range to securely exchange data wirelessly. NFC is a short-range (< 10 cm) wireless connectivity technology that operates at high frequency (HF) range with low bandwidth of radio waves, mainly at 13.56 MHz [13]. NFC comprises of three basic components - an antenna, a reader, and a tag. A reader (transmitter) sends a https://www.intechopen.com/chapters/75600 What Does Time Division Duplex Mean? Time division duplex (TDD) refers to duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band. It is a transmission scheme that allows asymmetric flow for uplink and downlink data transmission. Users are allocated time slots for uplink and downlink transmission. Time division multiplexing separates uplink and downlink signals by matching full duplex communication over a half-duplex communication link. This method is highly advantageous in case there is an asymmetry of uplink and downlink data rates. TDD divides a data stream into frames and assigns different time slots to forward and reverse transmissions, thereby allowing both types of transmissions to share the same transmission medium. https://www.techopedia.com/definition/27019/time-division-duplex-tdd Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.p.] A method of operating a smartphone using a first air interface and a second air	The Accused Products are configured to use a method “of operating a smartphone using a first air interface and a second air interface that differs from the first air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, operating a Samsung smartphone satisfies claim 16. Using Samsung Pay and/or Google Pay on a Samsung smartphone utilizes a first air interface

Claim	Exemplary Infringement Analysis ¹
interface that differs from the first air interface, the method comprising:	(NFC) and a second air interface (a cellular data network or WiFi) that differs from the first air interface to conduct financial transactions. Galaxy Z Series Galaxy Z Fold6 Z Flip6 Galaxy Z Fold5 Z Flip5 Galaxy Z Fold4 Z Flip4 Galaxy Z Fold3 Z Flip3 5G Galaxy Z Fold2 5G* Galaxy Z Flip* Galaxy Fold* Galaxy Note Series Galaxy Note20 Note20 Ultra 5G* Galaxy Note10 Lite Galaxy Note10 Note10+* Galaxy Note9* Galaxy Note8* Galaxy Note Fan Edition* Galaxy Note5* Galaxy S Series Galaxy S24 S24+ S24 Ultra Galaxy S23 FE 5G Galaxy S23 S23+ S23 Ultra 5G Galaxy S22 S22+ S22 Ultra 5G Galaxy S21 FE 5G Galaxy S21 S21+ S21 Ultra 5G Galaxy S20 FE S20 FE 5G Galaxy S20 S20+ S20 Ultra* Galaxy S10 Lite Galaxy S10e S10 S10+* Galaxy S9 S9+* Galaxy S8 S8+* Galaxy S7 edge S7* Galaxy S6 edge+* See https://www.samsung.com/my/samsung-pay/supported-devices/

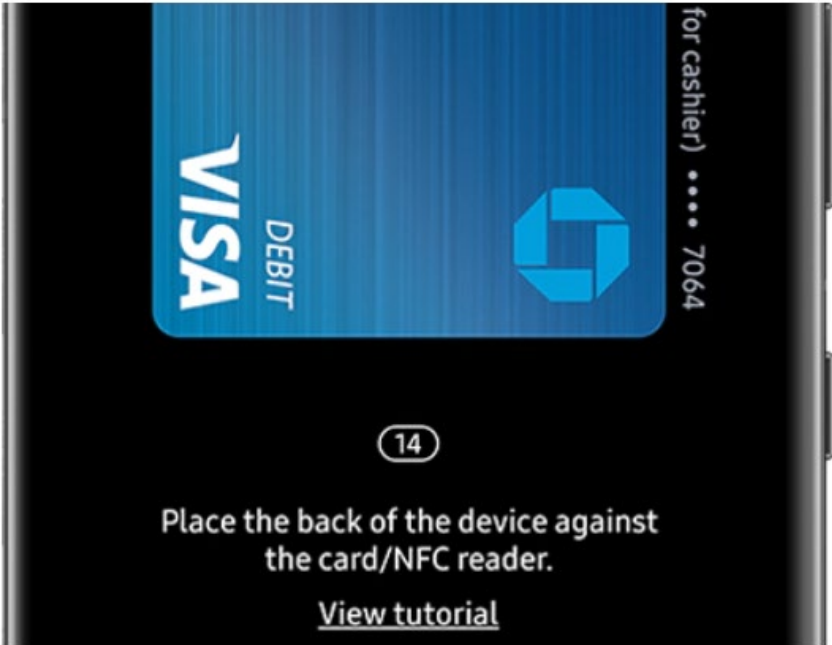
Claim	Exemplary Infringement Analysis ¹
	Fast, secure payments with Samsung Pay Samsung Pay allows you to tap to pay with your device anywhere NFC is available, making in-store payments quick and secure¹. You can also use Samsung Pay for in-app and online purchases at participating merchants, including Samsung.com. Learn more https://www.samsung.com/us/apps/samsung-wallet/ Settings > How to set up Google Pay All categories Change device All topics  1 Pay with ease using your Samsung Galaxy S10. Google Pay allows you to make payments for purchases you make in-store and online. Follow these steps to learn how to set up Google Pay. 2 Go to the Home screen. To open the menu, swipe up or down on the screen. 3 Choose Google Pay. Previous 1 / 23 Next https://www.t-mobile.com/support/tutorials/device/samsung/galaxy-s10/topic/settings/how-to-set-up-google-pay

Claim	Exemplary Infringement Analysis ¹
	 SAMSUNG Shop AI Mobile TV & Audio Appliances Computing Displays Accessories SmartThings Explore Support For Business How to use Google apps on your Galaxy phone or tablet Several different Google apps are available by default on your Galaxy phone and tablet, so you can start using them right away. For example, you can browse the web with Chrome, receive driving directions with Maps, and watch your favorite content with YouTube. Plus, you can download additional apps using the Google Play Store. Use Google apps The following Google apps may be preloaded on your device. If they aren't on your device, you can download them from the Google Play Store. To find your Google apps, swipe up on a Home screen to open the Apps screen, and then navigate to and tap the Google folder.  • Play Store: This app is the gateway to thousands of apps and games that you can install on your device. • Chrome: Browse the Internet with the Chrome browser and bring your open tabs, bookmarks, and address bar data from your computer to your mobile device. • Drive: Open, view, rename, and share files saved to your Google Drive cloud account. • Meet/Duo: Make video calls with friends and family. • Gmail: Send and receive emails with Google's web-based email service. • Google: Find content online using a search engine that learns your interests. You can turn on your personalized feed to receive customized content as well. • Google Pay: Make purchases with your Android phone at participating stores and in mobile apps. • Google TV: Watch movies and TV shows purchased from Google Play using the Google TV app. You can also view videos saved on your device. • Maps: Get directions and other location-based information. You must enable location services to use Google Maps. • Photos: Store and backup your photos and videos automatically to your Google account with Google Photos. • Messages: Google's text messaging app supports chat features that let you send high quality pictures, videos, and text over Wi-Fi. • YouTube: Watch and upload YouTube videos right from your device. Recommended Articles Google services on Wear OS Galaxy watches Download apps from the Play Store Note: The Galaxy Store cannot be accessed on Wear OS models. All... Set up and use your Wear OS Galaxy Watch Galaxy Watch device compatibility for Wear OS models Note: The Galaxy Watch4 and Galaxy Watch5... Use Google Assistant on your Wear OS Galaxy watch Set up and use Google Assistant on your watch Note: Google Assistant works separately on the watch fro... Google services on Wear OS Galaxy watches The OS on the Galaxy Watch4, Watch5, and Watch6 series gives you access to Google services! These... https://www.samsung.com/us/support/answer/ANS10002548/

Claim	Exemplary Infringement Analysis ¹
	Set up tap to pay on your phone 2. Set Google Pay as your default payment app < Next: 3. Set up a screen lock >  Next, make sure Google Pay is set up as the payment default for your device.  1. On your Android device, open the Settings app. 2. In the search bar, type "NFC." 3. Tap NFC > Contactless payments > Payment default. 4. Select Google Pay. 5. Tap OK. Steps may differ depending on your device. https://support.google.com/wallet/answer/14187052?sjid=3604572701579461674-NA

Claim	Exemplary Infringement Analysis ¹
	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.a.] communicating between the smartphone and an entity using the first air	The Accused Products use a method that involves “communicating between the smartphone and an entity using the first air interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung

Claim	Exemplary Infringement Analysis ¹
interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity;	smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes short-range communications between the Samsung smartphone and an entity such as a point-of-sale terminal using a first air interface, NFC. The communicating is responsive to the proximity criterion having been satisfied between the smartphone and the entity. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	 https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.b.] refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity	The Accused Products use a method that involves “refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes refraining from communicating between the Samsung smartphone and the point-of-sale terminal using NFC (the first air interface) absent the proximity criterion having been satisfied between the Samsung smartphone and the point-of-sale terminal (the entity).

Claim	Exemplary Infringement Analysis ¹
criterion having been satisfied between the smartphone and the entity; and	NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

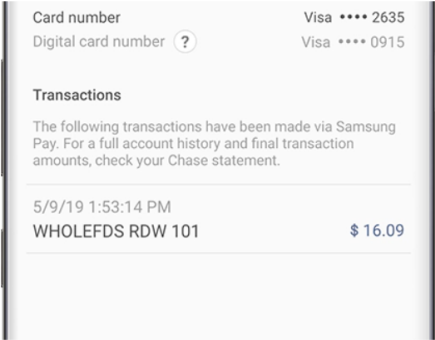
Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.c.] communicating, by the smartphone, using the second air interface to receive a communications service via the second air interface,	The Accused Products use a method that involves “communicating, by the smartphone, using the second air interface to receive a communications service via the second air interface, wherein the smartphone receives the communications service via the second air interface but does not receive the communications service from the entity via the first air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating by the Samsung smartphone using a cellular data network or WiFi (the second air interface) to receive a communications service via the cellular data network or WiFi. The Samsung smartphone does not receive the communications service from the point-of-sale terminal (the entity) via NFC (the first air interface).

Claim	Exemplary Infringement Analysis ¹
wherein the smartphone receives the communications service via the second air interface but does not receive the communications service from the entity via the first air interface,	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here.
	https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17,2021 Mobile data is an internet connection provided by a mobile network provider. You can
	https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does no emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.

Claim	Exemplary Infringement Analysis ¹
[16.d.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed concurrently with the communicating by the smartphone using the second air interface to receive the communications service via the second air interface,	The Accused Products use a method that involves “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed concurrently with the communicating by the smartphone using the second air interface to receive the communications service via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link (NFC) between the Samsung smartphone and the entity. This action can be performed concurrently with the Samsung smartphone communicating using a cellular data network or WiFi (the second air interface) to receive a communications service via the second air interface. What kind of data do we collect and use? As described in the Samsung Privacy Policy, in addition to your Samsung Account information and other PII described in this Privacy Notice, we also collect (including from you and/or other parties such as your card issuer/bank and payment network) information regarding your use of the Samsung Pay application. This information includes technical information such as unique device identifier, GUID identifier created as part of your Samsung Account, card issuer, card brand, device model, transaction date and time, whether an MST or NFC based transaction was used, card enrollment status, and whether a transaction successfully went through. Please note that we do not collect any transaction information that can be linked to you such as what you purchased, how much you spent or where you made your purchase. We may however collect, strictly on an aggregated anonymous basis only, transaction information such as amount, merchant name and location. Any such aggregated anonymous transaction information collected cannot be linked back to you or your Mobile Device in any way. https://images.samsung.com/is/content/samsung/p5/ae/samsungpay/images/privacy_notice.pdf

Claim	Exemplary Infringement Analysis ¹
	View recent transactions Note: You can only view transactions made with the Samsung Pay app. If you are looking for details about purchases made on Samsung.com or the Shop Samsung app, you can see them in your account. Did you pay the cable bill already? If you aren't sure, just take a look at your recent transactions. Open Samsung Pay on your phone. Tap Menu in the upper left corner, and then tap Cards. Select your desired payment card, and then swipe up to see up to a month's worth of recent transactions and purchases made with the Samsung Pay app.  https://www.samsung.com/us/support/answer/ANS00044981/

Claim	Exemplary Infringement Analysis ¹
	Data use for more helpful Google products & services Activity data allows for more helpful products & services The activity data saved in your Google Account provides helpful and personalized experiences in Google products, such as faster searching and automatic recommendations. At any time, you can control what activity gets saved to your account, download your data, or delete your activity. Data also helps us: • Make sure our services work as intended. • Monitor outages or troubleshooting issues that you report to us. • Make improvements to our services. For example, knowledge of which search terms are often misspelled helps us improve spell-check features used across our services. https://support.google.com/googlepay/answer/10400210?hl=en

View transaction history

1. Open Google Pay .
2. Under "Manage your Money," click **See transaction history**.
3. Here, you can click on any transaction to see the detailed transaction page.

Troubleshoot to check your previous transaction history

Your transaction history only contains those made through Google Pay and not all UPI or banking transactions. If you can't view your Google Pay transaction history, do the next steps.

Step 1: Update Google Pay

To check for updates, go to the Play Store or App Store.

Step 2: Check email address for Google Pay

If you registered more than one email address for your Google Pay account, go through the email selection steps again.

1. Open Google Pay .
2. Select your preferred language.
3. Enter your 10 digit phone number.
4. To accept all in-app permissions, tap **Allow**.
5. Enter the Google account registered to your mobile device and tap **Continue**. **Tip:** You can also add a new Google account.
6. To secure your Google Pay app , select **Use screen lock** or **Use Google PIN**.
Tip: Under screen lock, you can choose pattern lock, fingerprint sensor, or passcode.
7. Add a bank account.

If you used only one email address to register a Google Pay account, wait for 3 to 4 hours then try to check your transaction history again. If you can't check it, it can be due to poor cellular reception or network coverage.

<https://support.google.com/pay/india/answer/7430307?hl=en#:~:text=View%20transaction%20history%201%20Open%20Google%20Pay%20.,any%20transaction%20to%20see%20the%20detailed%20transaction%20page>

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.e.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol, and	The Accused Products use a method that involves “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed over a point-to-point short-range link between the Samsung smartphone and the point-of-sale terminal using a time division duplex protocol via NFC. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en How Does Near-Field Communication Work? Near-field communication is a wireless connectivity technology that is based on RFID. It uses induction coupling to enable communication between two compatible devices that are close. It enables users to automatically transfer data bi-directionally between two NFC-enabled devices by just touching both of them or by bringing them close to each other. NFC operates at the globally unlicensed 13.56 MHz frequency. It has three different data transfer rates – i.e., 212 kbit/s, 106 kbit/s, and 424 kbit/s. https://www.spiceworks.com/tech/networking/articles/what-is-near-field-communication/

Claim	Exemplary Infringement Analysis ¹
	NFC is a short-range half duplex communication technology which provide secure communication between devices in near field region. Near field communication, is a technology that allows two devices in close range to securely exchange data wirelessly. NFC is a short-range (< 10 cm) wireless connectivity technology that operates at high frequency (HF) range with low bandwidth of radio waves, mainly at 13.56 MHz [13]. NFC comprises of three basic components - an antenna, a reader, and a tag. A reader (transmitter) sends a https://www.intechopen.com/chapters/75600 What Does Time Division Duplex Mean? Time division duplex (TDD) refers to duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band. It is a transmission scheme that allows asymmetric flow for uplink and downlink data transmission. Users are allocated time slots for uplink and downlink transmission. Time division multiplexing separates uplink and downlink signals by matching full duplex communication over a half-duplex communication link. This method is highly advantageous in case there is an asymmetry of uplink and downlink data rates. TDD divides a data stream into frames and assigns different time slots to forward and reverse transmissions, thereby allowing both types of transmissions to share the same transmission medium. https://www.techopedia.com/definition/27019/time-division-duplex-tdd Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[16.f.] wherein the entity is not involved in providing the communications service.	The Accused Products use a method “wherein the entity is not involved in providing the communications service.” For example, when using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay, the point-of-sale terminal (the entity) is not involved in providing the communications service.

Claim	Exemplary Infringement Analysis ¹
	How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/

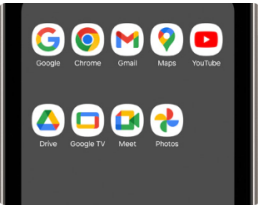
Claim	Exemplary Infringement Analysis ¹
	How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/ Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[17.] The method according to claim 16, wherein the communicating by the smartphone using the second air interface to receive the communications service via the second air interface comprises communicating between the smartphone and a base station using the second air interface to receive the communications service from the base station via the second air interface.	The Accused Products use a method that involves “wherein the communicating by the smartphone using the second air interface to receive the communications service via the second air interface comprises communicating between the smartphone and a base station using the second air interface to receive the communications service from the base station via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, using a Samsung smartphone to conduct financial transactions via Samsung Pay and/or Google Pay includes communicating between the Samsung smartphone and a base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the cellular data network or WiFi. What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/

Claim	Exemplary Infringement Analysis ¹
	How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.p.] A smartphone comprising:	The Accused Products are smartphones. For example, a Samsung smartphone that conducts financial transactions via Samsung Pay and/or Google Pay satisfies claim 18.

Claim	Exemplary Infringement Analysis ¹
	Galaxy Z Series Galaxy Z Fold6 Z Flip6 Galaxy Z Fold5 Z Flip5 Galaxy Z Fold4 Z Flip4 Galaxy Z Fold3 Z Flip3 5G Galaxy Z Fold2 5G* Galaxy Z Flip* Galaxy Fold* Galaxy Note Series Galaxy Note20 Note20 Ultra 5G* Galaxy Note10 Lite Galaxy Note10 Note10+* Galaxy Note9* Galaxy Note8* Galaxy Note Fan Edition* Galaxy Note5* Galaxy S Series Galaxy S24 S24+ S24 Ultra Galaxy S23 FE 5G Galaxy S23 S23+ S23 Ultra 5G Galaxy S22 S22+ S22 Ultra 5G Galaxy S21 FE 5G Galaxy S21 S21+ S21 Ultra 5G Galaxy S20 FE S20 FE 5G Galaxy S20 S20+ S20 Ultra* Galaxy S10 Lite Galaxy S10e S10 S10+* Galaxy S9 S9+* Galaxy S8 S8+* Galaxy S7 edge S7* Galaxy S6 edge+* See https://www.samsung.com/my/samsung-pay/supported-devices/

Claim	Exemplary Infringement Analysis ¹
	Fast, secure payments with Samsung Pay Samsung Pay allows you to tap to pay with your device anywhere NFC is available, making in-store payments quick and secure¹. You can also use Samsung Pay for in-app and online purchases at participating merchants, including Samsung.com. Learn more https://www.samsung.com/us/apps/samsung-wallet/ Settings > How to set up Google Pay All categories Change device All topics  1 Pay with ease using your Samsung Galaxy S10. Google Pay allows you to make payments for purchases you make in-store and online. Follow these steps to learn how to set up Google Pay. 2 Go to the Home screen. To open the menu, swipe up or down on the screen. 3 Choose Google Pay. Previous 1 / 23 Next https://www.t-mobile.com/support/tutorials/device/samsung/galaxy-s10/topic/settings/how-to-set-up-google-pay

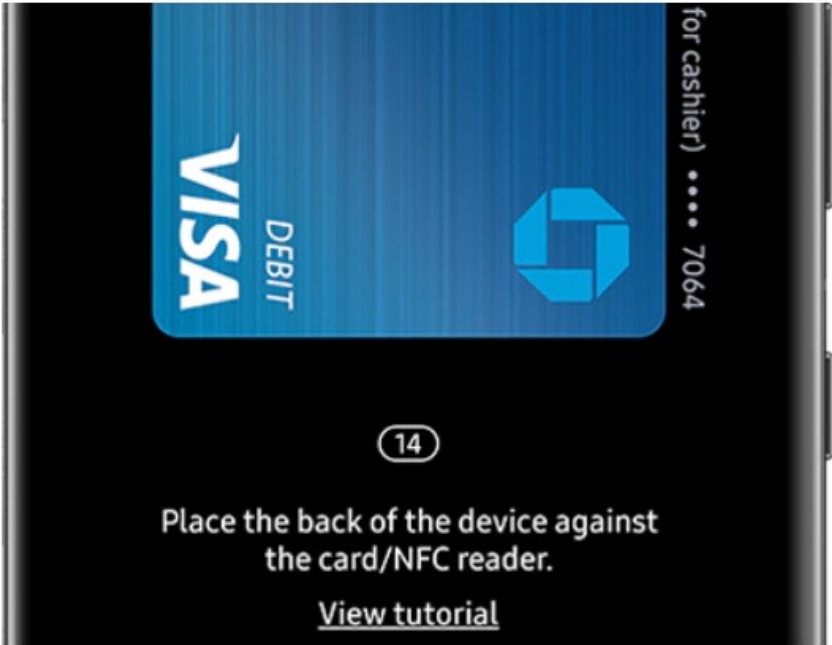
Claim	Exemplary Infringement Analysis ¹
	 SAMSUNG Shop AI Mobile TV & Audio Appliances Computing Displays Accessories SmartThings Explore Support For Business How to use Google apps on your Galaxy phone or tablet Several different Google apps are available by default on your Galaxy phone and tablet, so you can start using them right away. For example, you can browse the web with Chrome, receive driving directions with Maps, and watch your favorite content with YouTube. Plus, you can download additional apps using the Google Play Store. Use Google apps The following Google apps may be preloaded on your device. If they aren't on your device, you can download them from the Google Play Store. To find your Google apps, swipe up on a Home screen to open the Apps screen, and then navigate to and tap the Google folder.  • Play Store: This app is the gateway to thousands of apps and games that you can install on your device. • Chrome: Browse the Internet with the Chrome browser and bring your open tabs, bookmarks, and address bar data from your computer to your mobile device. • Drive: Open, view, rename, and share files saved to your Google Drive cloud account. • Meet/Duo: Make video calls with friends and family. • Gmail: Send and receive emails with Google's web-based email service. • Google: Find content online using a search engine that learns your interests. You can turn on your personalized feed to receive customized content as well. • Google Pay: Make purchases with your Android phone at participating stores and in mobile apps. • Google TV: Watch movies and TV shows purchased from Google Play using the Google TV app. You can also view videos saved on your device. • Maps: Get directions and other location-based information. You must enable location services to use Google Maps. • Photos: Store and backup your photos and videos automatically to your Google account with Google Photos. • Messages: Google's text messaging app supports chat features that let you send high quality pictures, videos, and text over Wi-Fi. • YouTube: Watch and upload YouTube videos right from your device. https://www.samsung.com/us/support/answer/ANS10002548/

Claim	Exemplary Infringement Analysis ¹
	Set up tap to pay on your phone 2. Set Google Pay as your default payment app < Next: 3. Set up a screen lock >  Next, make sure Google Pay is set up as the payment default for your device.  1. On your Android device, open the Settings app. 2. In the search bar, type "NFC." 3. Tap NFC > Contactless payments > Payment default. 4. Select Google Pay. 5. Tap OK. Steps may differ depending on your device. https://support.google.com/wallet/answer/14187052?sjid=3604572701579461674-NA

Claim	Exemplary Infringement Analysis ¹
	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.a.] a processor that is configured to control the smartphone to perform	The Accused Products include “a processor that is configured to control the smartphone to perform operations.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone has a processor. In one example, the Samsung Exynos processors are configured to control the Galaxy S22 Ultra to perform

Claim	Exemplary Infringement Analysis ¹				
operations comprising:	operations. As another example, Samsung utilizes Qualcomm® Snapdragon® processors in its Galaxy S24 Plus smartphones. Smartphone Samsung Exynos processors for smartphone is designed to deliver a superior experience with powerful performance, energy efficiency, and fast internet connection. Galaxy S22 Ultra Exynos 2200 https://semiconductor.samsung.com/processor/showcase/ Processor <table data-bbox="420 812 1900 987"> <tr> <td data-bbox="420 812 1117 902">Chipset</td><td data-bbox="1117 812 1900 902">Qualcomm® Snapdragon® 8 Gen 3 for Galaxy</td></tr> <tr> <td data-bbox="420 902 1117 987">Cores</td><td data-bbox="1117 902 1900 987">Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz</td></tr> </table> https://www.att.com/buy/phones/samsung-galaxy-s24plus.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.	Chipset	Qualcomm® Snapdragon® 8 Gen 3 for Galaxy	Cores	Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz
Chipset	Qualcomm® Snapdragon® 8 Gen 3 for Galaxy				
Cores	Octa-core, 1 @ 3.39GHz, 3 @ 3.1GHz, 2 @ 2.9GHz, 2 @ 2.2GHz				
[18.b.] communicating between the smartphone and an entity using the first air	The Accused Products engage in operations that include “communicating between the smartphone and an entity using the first air interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone				

Claim	Exemplary Infringement Analysis ¹
interface responsive to a proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity;	conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including short-range communications between the Samsung smartphone and an entity such as a point-of-sale terminal using a first air interface, NFC. The communicating is responsive to the proximity criterion having been satisfied between the smartphone and the entity. Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/ How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	 https://www.samsung.com/us/support/answer/ANS00045102/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.c.] refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity	The Accused Products engage in operations that include “refraining from communicating between the smartphone and the entity by the smartphone using the first air interface absent the proximity criterion having been satisfied between the smartphone and the entity.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including refraining from communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) absent the proximity criterion having been satisfied between the Samsung smartphone and the point-of-sale terminal (the entity).

Claim	Exemplary Infringement Analysis ¹
criterion having been satisfied between the smartphone and the entity; and	NFC is limited to short-range communication, which has important implications for physical access security. A user must be within 3.5 inches (10 cm) of an NFC terminal to process a payment or open a door. Another important aspect is that no power is required for the basic https://www.techtarget.com/searchmobilecomputing/definition/Near-Field-Communication How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	https://www.samsung.com/us/support/answer/ANS00045102/

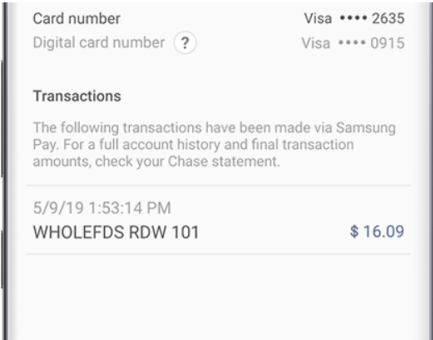
Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Step 2: Hold the back of your phone to the payment reader When you're done paying, a blue check mark appears on the screen. If the check mark isn't on your screen: • Try to hold your phone in a different way. Your NFC antenna could be near the top or bottom of your device. • Hold your phone closer to the payment reader. • Hold your phone to the payment reader for a few extra seconds. If there's a check mark but the cashier says that the payment didn't work: • Double-check if the store accepts mobile payments. • Contact your bank. There may be an issue with your card and your bank may have declined the transaction. If the transaction is declined, you aren't charged. https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.d.] communicating, by the smartphone, using the second air interface to receive a communications service via the second air interface,	The Accused Products engage in operations including “communicating, by the smartphone, using the second air interface to receive a communications service via the second air interface, wherein the smartphone receives the communications service via the second air interface but does not receive the communications service from the entity via the first air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including communicating by the Samsung smartphone using a cellular data network or WiFi (the second air interface) to receive a communications service via the cellular data network or WiFi. The Samsung smartphone does not receive the communications service from the point-of-sale terminal (the entity) via NFC (the first air interface).

Claim	Exemplary Infringement Analysis ¹
wherein the smartphone receives the communications service via the second air interface but does not receive the communications service from the entity via the first air interface,	What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/ How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Background on NFC Technology Based on the 13.56 MHz wireless communication protocol, the NFC technology allows wireless communication between two NFC-compliant devices up to 10 centimeters apart. Very convenient, this connection does not rely on Wi-Fi, 4G, LTE or similar technologies, and it doesn't cost anything to use: no need for the user to be skilled, does not need batteries, does no emit RF waves in the absence of a reader (it is a passive technology), NFC is within range everyone's range thanks to the massive deployment of NFC in smartphones. https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc.html Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.

Claim	Exemplary Infringement Analysis ¹
[18.e.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed concurrently with the communicating by the smartphone using the second air interface to receive the communications service via the second air interface,	The Accused Products engage in operations including “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed concurrently with the communicating by the smartphone using the second air interface to receive the communications service via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay is configured to perform operations including communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed concurrently with the Samsung smartphone communicating using a cellular data network or WiFi (the second air interface) to receive a communications service via the second air interface. What kind of data do we collect and use? As described in the Samsung Privacy Policy, in addition to your Samsung Account information and other PII described in this Privacy Notice, we also collect (including from you and/or other parties such as your card issuer/bank and payment network) information regarding your use of the Samsung Pay application. This information includes technical information such as unique device identifier, GUID identifier created as part of your Samsung Account, card issuer, card brand, device model, transaction date and time, whether an MST or NFC based transaction was used, card enrollment status, and whether a transaction successfully went through. Please note that we do not collect any transaction information that can be linked to you such as what you purchased, how much you spent or where you made your purchase. We may however collect, strictly on an aggregated anonymous basis only, transaction information such as amount, merchant name and location. Any such aggregated anonymous transaction information collected cannot be linked back to you or your Mobile Device in any way. https://images.samsung.com/is/content/samsung/p5/ae/samsungpay/images/privacy_notice.pdf

Claim	Exemplary Infringement Analysis ¹
	View recent transactions Note: You can only view transactions made with the Samsung Pay app. If you are looking for details about purchases made on Samsung.com or the Shop Samsung app, you can see them in your account. Did you pay the cable bill already? If you aren't sure, just take a look at your recent transactions. Open Samsung Pay on your phone. Tap Menu in the upper left corner, and then tap Cards. Select your desired payment card, and then swipe up to see up to a month's worth of recent transactions and purchases made with the Samsung Pay app.  https://www.samsung.com/us/support/answer/ANS00044981/

Claim	Exemplary Infringement Analysis ¹
	Data use for more helpful Google products & services Activity data allows for more helpful products & services The activity data saved in your Google Account provides helpful and personalized experiences in Google products, such as faster searching and automatic recommendations. At any time, you can control what activity gets saved to your account, download your data, or delete your activity. Data also helps us: • Make sure our services work as intended. • Monitor outages or troubleshooting issues that you report to us. • Make improvements to our services. For example, knowledge of which search terms are often misspelled helps us improve spell-check features used across our services. https://support.google.com/googlepay/answer/10400210?hl=en

View transaction history

1. Open Google Pay .
2. Under "Manage your Money," click **See transaction history**.
3. Here, you can click on any transaction to see the detailed transaction page.

Troubleshoot to check your previous transaction history

Your transaction history only contains those made through Google Pay and not all UPI or banking transactions. If you can't view your Google Pay transaction history, do the next steps.

Step 1: Update Google Pay

To check for updates, go to the Play Store or App Store.

Step 2: Check email address for Google Pay

If you registered more than one email address for your Google Pay account, go through the email selection steps again.

1. Open Google Pay .
2. Select your preferred language.
3. Enter your 10 digit phone number.
4. To accept all in-app permissions, tap **Allow**.
5. Enter the Google account registered to your mobile device and tap **Continue**. **Tip:** You can also add a new Google account.
6. To secure your Google Pay app , select **Use screen lock** or **Use Google PIN**.
Tip: Under screen lock, you can choose pattern lock, fingerprint sensor, or passcode.
7. Add a bank account.

If you used only one email address to register a Google Pay account, wait for 3 to 4 hours then try to check your transaction history again. If you can't check it, it can be due to poor cellular reception or network coverage.

<https://support.google.com/pay/india/answer/7430307?hl=en#:~:text=View%20transaction%20history%201%20Open%20Google%20Pay%20.,any%20transaction%20to%20see%20the%20detailed%20transaction%20page>

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.f.] wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol, and	The Accused Products engage in operations including “wherein the communicating between the smartphone and the entity using the first air interface responsive to the proximity criterion having been satisfied between the smartphone and the entity to provide information to the entity is performed over a point-to-point short-range link between the smartphone and the entity using a time division duplex protocol.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay is configured to perform operations including communicating between the Samsung smartphone and the point-of-sale terminal (the entity) using NFC (the first air interface) responsive to the proximity criterion having been satisfied to provide information to the entity over the short-range link between the Samsung smartphone and the entity. This action can be performed over a point-to-point short-range link between the Samsung smartphone and the point-of-sale terminal using a time division duplex protocol via NFC. How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en How Does Near-Field Communication Work? Near-field communication is a wireless connectivity technology that is based on RFID. It uses induction coupling to enable communication between two compatible devices that are close. It enables users to automatically transfer data bi-directionally between two NFC-enabled devices by just touching both of them or by bringing them close to each other. NFC operates at the globally unlicensed 13.56 MHz frequency. It has three different data transfer rates – i.e., 212 kbit/s, 106 kbit/s, and 424 kbit/s. https://www.spiceworks.com/tech/networking/articles/what-is-near-field-communication/

Claim	Exemplary Infringement Analysis ¹
	NFC is a short-range half duplex communication technology which provide secure communication between devices in near field region. Near field communication, is a technology that allows two devices in close range to securely exchange data wirelessly. NFC is a short-range (< 10 cm) wireless connectivity technology that operates at high frequency (HF) range with low bandwidth of radio waves, mainly at 13.56 MHz [13]. NFC comprises of three basic components - an antenna, a reader, and a tag. A reader (transmitter) sends a https://www.intechopen.com/chapters/75600 What Does Time Division Duplex Mean? Time division duplex (TDD) refers to duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band. It is a transmission scheme that allows asymmetric flow for uplink and downlink data transmission. Users are allocated time slots for uplink and downlink transmission. Time division multiplexing separates uplink and downlink signals by matching full duplex communication over a half-duplex communication link. This method is highly advantageous in case there is an asymmetry of uplink and downlink data rates. TDD divides a data stream into frames and assigns different time slots to forward and reverse transmissions, thereby allowing both types of transmissions to share the same transmission medium. https://www.techopedia.com/definition/27019/time-division-duplex-tdd Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[18.h.] wherein the entity is not involved in providing the communications service.	The Accused Products are configured to engage in operations including “wherein the entity is not involved in providing the communications service.” For example, the point-of-sale terminal (the entity) is not involved in providing the communications service to a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay.

Claim	Exemplary Infringement Analysis ¹
	How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/

Claim	Exemplary Infringement Analysis ¹
	How does Samsung Pay work? Samsung Pay uses Near Field Communication (NFC) to make contactless mobile payments. How do I make in-store purchases with Samsung Pay? - Start by either swiping-up from the home button or opening the Samsung Pay app from your home screen. - Next, select the card you want to pay with. - You can authenticate by IRIS (available on selected phones), fingerprint or pin. - Hover your phone about 2-4 cm over the card reader where you'd usually tap your physical card to complete the transaction. https://www.samsung.com/uk/samsung-pay/faq/ Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en

Claim	Exemplary Infringement Analysis ¹
	Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.
[19.] The smartphone according to claim 18, wherein the communicating by the smartphone using the second air interface to receive the communications service via the second air interface comprises communicating between the smartphone and a base station using the second air interface to receive the communications service from the base station via the second air interface.	The Accused Products engage in operations including “communicating by the smartphone using the second air interface to receive the communications service via the second air interface comprises communicating between the smartphone and a base station using the second air interface to receive the communications service from the base station via the second air interface.” On information and belief, the Accused Products include software configured to execute this claim limitation. Plaintiff reserves its right to supplement these contentions with the corresponding source code. For example, a Samsung smartphone conducting financial transactions via Samsung Pay and/or Google Pay engages in operations including communicating between the Samsung smartphone and a base station using a cellular data network or WiFi (the second air interface) to receive a communications service from the base station via the cellular data network or WiFi. What is mobile data & how do I turn it on or off Mobile data is the internet connectivity provided by your mobile network provider. While your phone will automatically switch to Wi-Fi if a network is available, you can manually control your mobile data use by enabling and disabling it. You can also enable Data saver to prevent mobile data usage by apps that are running in the background. If you have disabled mobile data and would like to activate Wifi calling, you can find out more here. https://www.samsung.com/uk/support/mobile-devices/how-do-i-enable-or-disable-mobile-data/

Claim	Exemplary Infringement Analysis ¹
	How to enable or disable Mobile data on your Galaxy phone Last Update date : Nov 17, 2021 Mobile data is an internet connection provided by a mobile network provider. You can https://www.samsung.com/latin_en/support/mobile-devices/how-to-enable-or-disable-mobile-data-on-your-galaxy-phone/ Near Field Communication (NFC) technology allows users to make secure transactions, exchange digital content, and connect electronic devices with a touch. NFC transmissions are short range (from a touch to a few centimetres) and require the devices to be in close proximity. NFC is the technology in contactless cards, and the most common use of NFC technology in your smartphone is making easy payments with Samsung Pay. NFC can also be used to quickly connect with wireless devices and transfer data with Android Beam. https://www.samsung.com/uk/support/mobile-devices/what-is-nfc-and-how-do-i-use-it/

Claim	Exemplary Infringement Analysis ¹
	Where you can use Google Wallet Important: To make contactless payments, Near Field Communication (NFC) must be on. To turn on NFC, check your phone settings app. To use tap to pay on Pixel Fold or another foldable device, fold your device. You can pay with Google Wallet wherever you find the contactless or Google Pay symbols. They're located on the payment terminal screen or cash register at checkout. You can buy items with your phone or pay for transit on trains and buses on contactless terminals with either of these logos:   <i>Google Pay symbol Contactless symbol</i> https://support.google.com/wallet/answer/12060043?hl=en Investigation of both the patent and the Accused Products (and other potentially infringing products) is ongoing. This chart is based on evidence and analysis reasonably accessible at this time. Telcom reserves the right to update and amend the above as the litigation progresses, including in view of discovery provided by the Defendants.