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IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

CARDWARE INC.,

Plaintiff,

vs.

SAMSUNG ELECTRONICS CO. LTD., ET AL.,

Defendants.

CASE NO.: 2:22-CV-00141-JRG-RSP (PENDING IN E.D. TEX.)

NON-PARTY APPLE INC.'S OBJECTIONS AND RESPONSES TO SUBPOENA TO TESTIFY AT A DEPOSITION IN A CIVIL CASE

CARDWARE EXHIBIT 2012
APPLE v. CARDWARE IPR2025-01146

Apple Inc. ("Apple"), by and through its under-signed counsel and pursuant to Rules 26 and 45 of the Federal Rules of Civil Procedure, hereby serves the following objections and responses to Defendants Samsung Electronics Co. Ltd.'s and Samsung Electronics America, Inc.'s ("Defendants") Subpoena to Testify at a Deposition in a Civil Action (the "Subpoena"), served on Apple on or about December 9, 2022.

The following objections and responses are based on Apple's current knowledge, information and belief after making a reasonable inquiry within the time allotted by the Subpoena. Apple's investigation into this matter is ongoing, and it is willing to meet and confer with Defendants regarding the scope of the information sought. Apple reserves the right to supplement its objections and responses to the Subpoena to the extent additional or different information becomes available. Nothing in these objections or responses should be construed as a waiver of any rights of Apple under applicable rules and governing laws. Any documents or testimony provided in response to the Subpoena will be made pursuant to the Protective Order entered in the underlying litigation, with Apple reserving the right to request supplemental protections.

GENERAL OBJECTIONS AND RESPONSES

Each of Apple's responses, below, is subject to and incorporates the following General Objections and Responses, in addition to any specifically stated objections. The assertion of specific objections in response to any individual topic or request does not waive any of Apple's General Objections.

1. Apple's headquarters are located in the Northern District of California, and not in Eastern District of Texas where this litigation is currently pending nor the Central District of California where the Subpoena was served. Pursuant to Federal Rule of Civil Procedure 45, the U.S. District Court for the Northern District of California is the governing district for purposes of the Subpoena and any related motions. Nothing in these objections and responses should be interpreted as a waiver of the jurisdiction of the Northern District of California.

CARDWARE EXHIBIT 2012
APPLE v. CARDWARE IPR2025-01146
Page 2 of 23

2. Apple is a third party and non-party to the above-captioned action. Apple objects to each Request for Production ("Request") and Deposition Topic ("Topic") listed in Attachment A to the Subpoena and to all Definitions and Instructions to the Subpoena to the extent they seek documents and testimony that are available from one or more parties to the litigation and/or from public sources. It is unduly burdensome to ask third-party Apple to collect, review, process, and produce documents that could be sought from and produced by the parties to the litigation and/or that are publicly available.

3. Federal Rule of Civil Procedure 26(b)(1) limits the scope of discovery to any "nonprivileged matter that is relevant to any party's claim or defense and proportional to the needs of the case." Apple objects to the Subpoena and all Requests and Topics to the extent they seek documents or testimony beyond the permissible and reasonable scope of discovery.

4. Apple objects to the Subpoena and all Requests and Topics to the extent they seek third-party Apple's trade secrets, Apple's closely guarded research and development information, and other commercially sensitive and technical Apple materials protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Apple further objects to the Subpoena and all Requests and Topics to the extent they seek disclosure of proprietary and/or highly confidential and sensitive information of third-party Apple. Any materials produced in response to the Subpoena are subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections. Given the extremely sensitive nature of some of the documents and information sought by the Subpoena, Apple will not produce such documents and information unless the relevance, proportionality, and protective order issues have been adequately resolved.

5. Apple objects to the Subpoena and all Requests and Topics to the extent they seek the production of documents or testimony protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Such documents or testimony will not be produced, and

any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

6. Apple objects to the Subpoena and all Requests and Topics to the extent they are not narrowly or appropriately tailored to avoid imposing undue burden or expense on third-party Apple. Apple further objects to the Subpoena, including all Requests and Topics, to the extent that the burden or expense of the proposed discovery outweighs its likely benefit.

7. Apple objects to the Subpoena and all Requests and Topics to the extent they seek documents not in Apple's possession, custody, or control on the grounds that it would require more of Apple than any obligation imposed by law, would subject Apple to unreasonable and undue annoyance, oppression, burden, and expense, and would seek to impose upon third-party Apple an obligation to investigate or obtain information or materials from other third parties.

8. Apple objects to the Subpoena and all Requests and Topics to the extent they seek documents and information in the possession of, more efficiently obtained from, and/or confidential to one or more other third parties. To the extent Apple produces documents containing any third-party confidential information, it will do so only after fulfilling its obligations to the affected third-party under any applicable confidentiality agreement(s).

9. Apple objects to the Subpoena, including all Requests and Topics, as imposing undue expense on a non-party to this dispute, and as unduly burdensome and irrelevant to the litigation, especially to the extent that it may purport to require search and production from electronic mail systems or archival storage systems.

10. Apple objects to the Subpoena and all Requests and Topics to the extent they seek to impose any instruction, requirement, or request on Apple exceeding that required by the Federal Rules of Civil Procedure, the Local Rules, or any order in the above-captioned action, and/or would subject third-party Apple to unreasonable and undue burden and expense.

11. Apple objects to the Subpoena to the extent it purports to seek discovery from any entity or individual other than Apple Inc., headquartered in Cupertino, California. In particular,

Apple objects to the Definition of "You," "Your," and "Apple" in the Subpoena as unduly broad and overly burdensome. In particular, Apple objects to the inclusion in such Definition of "all predecessors, successors, subsidiaries, divisions, and/or affiliates [of Apple Inc.], past or present, and all past or present officers, directors, agents, employees, consultants, accountants, attorneys, representatives, and any other person or entity acting on behalf of any of the foregoing." Apple will limit its investigation, collection, review, production (if any), and testimony (if any) to Apple Inc.

12. Apple objects to the Subpoena to the extent it seeks disclosure of confidential commercial information and/or disclosure of an unretained expert's opinion or information that does not describe specific occurrences in the dispute and results from the expert's study that was not requested by a party pursuant to Federal Rule of Civil Procedure 45(d)(3)(B).

13. Apple objects to the definitions of "Related Patents" as overly broad, unduly burdensome, vague, ambiguous, calling for an expert opinion or calling for a legal conclusion.

14. Apple objects to the Subpoena on the grounds that the date and location noticed for the document production and deposition are inconvenient and unduly burdensome to third-party Apple. Apple will meet and confer with Defendants regarding a mutually convenient time and place for the provision of documents responsive to the Subpoena, if any, and will work to provide the information sought via deposition through other, less burdensome means, such as a declaration.

15. Apple objects to the Instructions included in the Subpoena as overly broad, unduly burdensome, and improper in that they seek to obtain discovery outside of the scope of the Federal Rules of Civil Procedure. Apple objects to all Instructions to the extent that they purport to place obligations on Apple beyond the permissible and reasonable scope of discovery.

16. Apple submits these responses and objections without conceding the relevance or materiality of the subject matter of any Request or Topic or of any document or thing, or that any responsive materials exist. Apple also submits the following responses and objections on

the basis of information now known to Apple and without waiving any further objects to the materiality or relevance of any of the information requested. Apple further reserves all objections or other questions as to the competency, relevance, materiality, privilege, or admissibility as evidence in any subsequent proceeding in or at trial of this or any other action for any purpose whatsoever of Apple's responses herein and any document or thing, or information identified or provided in response to the Subpoena.

17. Apple's objections as set forth herein are made without prejudice to update, amend, or supplement these Objections and Responses to the Subpoena.

OBJECTIONS AND RESPONSES TO REQUESTS FOR PRODUCTION

Specifically incorporating each of its General Objections and Responses into each and every Response below, Apple objects and responds as follows:

REQUEST NO. 1:

Documents, communications, and things describing Apple's conception and reduction to practice of Apple Pay's use of tokenization (replacing the Primary Account Number/credit card number with a token or substitute number), a dynamic limited-use cryptogram, and NFC (or other wireless communication technology) to accomplish a mobile transaction prior to the commercial launch of Apple Pay in October 2014. *See* Exs. 1-3.

OBJECTIONS AND RESPONSES TO REQUEST NO. 1:

Apple incorporates each of its General Objections and Responses into its response to Request No. 1 as if fully set forth herein. Apple further objects to this Request at least for the following reasons:

Overly Broad and Unduly Burdensome: Apple objects to this Request as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. The Request is not narrowly or reasonably tailored and seeks documents that are over eight years old. Apple further objects to the extent that this Request seeks documents and things not in the possession, custody, or control of Apple, and/or that are contained in archival systems.

CARDWARE EXHIBIT 2012
APPLE v. CARDWARE IPR2025-01146
Page 6 of 23

Vague, Ambiguous, and Calling for a Legal Conclusion: Apple objects to this Request as vague, ambiguous, and calling for a legal conclusion. For example, the terms and phrases "conception," "reduction to practice," "tokenization, "dynamic limited-use cryptogram," and "NFC (or other wireless communication technology" are unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Apple objects to this Request to the extent that it seeks the production of documents or information protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not produce privileged or protected documents or information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Request to the extent it seeks documents, things, or information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Request to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not produce information referring or relating to unannounced or unreleased products. Apple further objects to this Request to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above-captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving

the issues. Furthermore, to the extent Apple produces any materials in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding the scope of this Request.

REQUEST NO. 2:

Documents, communications, and things describing Apple's discussions with Visa, MasterCard and American Express or any third party merchant, bank, payment provider, standards organization, or clearance house, regarding mobile payments using tokenization, dynamic limited-use cryptograms, and NFC (or other wireless communication technology), prior to the 2014 commercial launch of Apple Pay. This request includes, but is not limited to, discussions that occurred in January 2013 with Visa, MasterCard and American Express as described in Exhibit 4 ("The financial industry began working on the Apple Pay project in January 2013, when Apple had the first concrete conversations with the big credit card networks, Visa, MasterCard and American Express, after years of more vague conversations about the best way for Apple to get involved.").

OBJECTIONS AND RESPONSES TO REQUEST. 2:

Apple incorporates each of its General Objections and Responses into its response to Request No. 2 as if fully set forth herein. Apple further objects to this Request at least for the following reasons:

Overly Broad and Unduly Burdensome: Apple objects to this Request as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. The Request is not narrowly or reasonably tailored, particularly in its request for information regarding discussions with "any third party merchant, bank, payment provider, standards organization, or clearing house," and seeks information that is nearly ten years old. Apple further objects to the extent that this Request seeks documents and things not in the possession, custody, or control of Apple, and/or that are contained in archival systems. Apple

further objects to the extent that this Request seeks documents and things that are in the possession of, more efficiently obtained from, and/or confidential to one or more other third parties. To the extent Apple produces documents containing any third-party confidential information, it will do so only after fulfilling its obligations to the affected third-party under any applicable confidentiality agreement(s).

Vague and Ambiguous: Apple objects to this Request as vague and ambiguous. For example, the terms and phrases "tokenization, "dynamic limited-use cryptograms," and "NFC (or other wireless communication technology" are unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Apple objects to this Request to the extent that it seeks the production of documents or information protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not produce privileged or protected documents or information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Request to the extent it seeks documents, things, or information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Request to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not produce information referring or relating to unannounced or unreleased products. Apple further objects to this Request to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and

proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above-captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple produces any materials in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding the scope of this Request.

REQUEST NO. 3:

Documents, communications, and things sufficient to describe Apple's discussions and interactions with EMVCo regarding mobile payments using tokenization, dynamic limited-use cryptograms, and NFC (or other wireless communication technology) prior to the commercial launch of Apple Pay in 2014. This request includes, but is not limited to, documents, communications, and things relating to the *EMV® Payment Tokenisation Specification – Technical Framework v1.0* referred to in Ex. 5, and all predecessor documents and drafts of the same.

OBJECTIONS AND RESPONSES TO REQUEST NO. 3:

Apple incorporates each of its General Objections and Responses into its response to Request No. 3 as if fully set forth herein. Apple further objects to this Request at least for the following reasons:

Overly Broad and Unduly Burdensome: Apple objects to this Request as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. The Request is not narrowly or reasonably tailored, particularly in its request for information regarding "discussions and interactions" with EMVCo and "all predecessor documents and drafts" of the identified technical documents, and seeks information that is over eight years old. Apple further objects to the extent that this Request seeks documents and things

not in the possession, custody, or control of Apple, and/or that are contained in archival systems. Apple further objects to the extent that this Request seeks documents and things that are in the possession of, more efficiently obtained from, and/or confidential to one or more other third parties. To the extent Apple produces documents containing any third-party confidential information, it will do so only after fulfilling its obligations to the affected third-party under any applicable confidentiality agreement(s).

Vague and Ambiguous: Apple objects to this Request as vague and ambiguous. For example, the terms and phrases "tokenization, "dynamic limited-use cryptograms," "NFC (or other wireless communication technology," and "predecessor documents" are unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Apple objects to this Request to the extent that it seeks the production of documents or information protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not produce privileged or protected documents or information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Request to the extent it seeks documents, things, or information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Request to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not produce information referring or relating to unannounced or unreleased products. Apple further objects to this Request to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or

Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above-captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple produces any materials in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding the scope of this Request.

REQUEST FOR PRODUCTION NO. 4:

All Documents, communications, and things concerning the Asserted Patents and Related Patents.

OBJECTIONS AND RESPONSES TO REQUEST NO. 4:

Apple incorporates each of its General Objections and Responses into its response to Request No. 4 as if fully set forth herein. Apple further objects to this Request at least for the following reasons:

Publicly Available Documents: Apple objects to this Request to the extent it seeks documents and information that are publicly available.

Overly Broad and Unduly Burdensome: Apple objects to this Request as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. The Request is not narrowly or reasonably tailored, particularly in its request for documents regarding "[a]ll Documents, communications, and things" and by virtue of the defined term "Related Patents." Apple further objections to this Request because it is not limited in time and/or to any particular subject matter relevant to the parties' claims and defenses in the litigation. Apple further objects to the extent that this Request seeks documents and things not in the possession, custody, or control of Apple, and/or that are contained in archival systems.

Vague, Ambiguous, and Calling for a Legal Conclusion: Apple objects to this Request as vague, ambiguous, and calling for a legal conclusion. In particular, the defined term "Related Patents" is unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Apple objects to this Request to the extent that it seeks the production of documents or information protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not produce privileged or protected documents or information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Request to the extent it seeks documents, things, or information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Request to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not produce information referring or relating to unannounced or unreleased products. Apple further objects to this Request to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above-captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple produces any materials in response to the Subpoena,

such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding the scope of this Request.

REQUEST NO. 5:

All Documents, communications, and things concerning CardWare, Virtual Electric, Inc., and David Wyatt.

OBJECTIONS AND RESPONSES TO REQUEST NO. 5:

Apple incorporates each of its General Objections and Responses into its response to Request No. 5 as if fully set forth herein. Apple further objects to this Request at least for the following reasons:

Party Discovery: Apple objects to this Request to the extent it seeks documents and information in the possession of, available to, and/or more efficiently obtained from Plaintiff.

Overly Broad and Unduly Burdensome: Apple objects to this Request as overbroad and unduly burdensome, and failing to take reasonable steps to avoid imposing undue burden and expense on third-party Apple. The Request is not reasonably or narrowly tailored, particularly in its request for documents regarding "[a]ll Documents, communications, and things" and because is not limited to any subject matter relevant to the parties' claims or defenses in the underlying litigation. Apple further object to the Request as overly broad and unduly burdensome because it is unbounded by time. Apple further objects to the extent that this Request seeks documents and things not in the possession, custody, or control of Apple, and/or that are contained in archival systems.

Privileged and Work Product Materials: Apple objects to this Request to the extent that it seeks the production of documents or information protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not produce privileged or protected documents

or information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Request to the extent it seeks documents, things, or information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Request to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not produce information referring or relating to unannounced or unreleased products. Apple further objects to this Request to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendant has not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above- captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple produces any materials in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendant regarding the scope of this Request.

OBJECTIONS AND RESPONSES TO DEPOSITION TOPICS

Specifically incorporating each of its General Objections and Responses into each and every Response below, Apple objects and responds as follows:

TOPIC NO. 1:

Apple's conception and reduction to practice of Apple Pay's use of tokenization (replacing the Primary Account Number/credit card number with a token or substitute number), a dynamic limited-use cryptogram, and NFC (or other wireless communication technology) to accomplish a mobile transaction prior to the commercial launch of Apple Pay in October 2014.

OBJECTIONS AND RESPONSES TO TOPIC NO. 1:

Apple hereby incorporates the General Objections into its response to Topic No. 1 as if fully set forth herein. Apple further objects to this Topic at least for the following reasons:

Overly Broad and Unduly Burdensome: Third-party Apple objects to this Topic as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. Specifically, the Topic fails to take reasonable steps to avoid imposing undue burden and expense on third-party Apple, is not narrowly or reasonably tailored and seeks information that is over eight years old. Apple also objects to the extent that the Topic seeks information that is not reasonably maintained and/or accessible by Apple in the ordinary course of business and/or that is not in the possession, custody, or control of Apple.

Vague, Ambiguous, and Calling for a Legal Conclusion: Apple objects to this Topic as vague, ambiguous, and calling for a legal conclusion. For example, the terms and phrases "conception," "reduction to practice," "tokenization, "dynamic limited-use cryptogram," and "NFC (or other wireless communication technology" are unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Third-party Apple objects to this Topic to the extent that it seeks testimony protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not provide privileged or protected information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Topic to the extent it seeks information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Topic to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not provide testimony referring or relating to unannounced or unreleased products. Apple further objects to this Topic to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above- captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple provides any testimony in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding this Topic.

TOPIC NO. 2:

Apple's discussions with Visa, MasterCard and American Express or any third party merchant, bank, payment provider, standards organization, or clearance house, regarding mobile payments using tokenization, dynamic limited-use cryptograms, and NFC (or other wireless communication technology), prior to the 2014 commercial launch of Apple Pay.

OBJECTIONS AND RESPONSES TO TOPIC NO. 2:

Apple hereby incorporates the General Objections into its response to Topic No. 2 as if fully set forth herein. Apple further objects to this Topic at least for the following reasons:

Overly Broad and Unduly Burdensome: Third-party Apple objects to this Topic as overbroad and unduly burdensome, and improperly attempting to shift the burden of identifying prior art to third-party Apple. Specifically, the Topic fails to take reasonable steps to avoid imposing undue burden and expense on third-party Apple, and seeks information that is over eight years old. Apple further objects to the Topic as not narrowly or reasonably tailored, particularly in its request for information regarding discussions with "any third party merchant, bank, payment provider, standards organization, or clearing house." Apple also objects to the extent that the Topic seeks information that is not reasonably maintained and/or accessible by Apple in the ordinary course of business and/or that is not in the possession, custody, or control of Apple. Apple further objects to the extent that this Topic seeks information that is in the possession of, more efficiently obtained from, and/or confidential to one or more other third parties. To the extent Apple provides testimony containing any third-party confidential information, it will do so only after fulfilling its obligations to the affected third-party under any applicable confidentiality agreement(s).

Vague and Ambiguous: Apple objects to this Topic as vague and ambiguous. For example, the terms and phrases "tokenization, "dynamic limited-use cryptograms," and "NFC (or other wireless communication technology" are unclear and would require the subjective judgment of Apple or its attorneys.

Privileged and Work Product Materials: Third-party Apple objects to this Topic to the extent that it seeks testimony protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not provide privileged or protected information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Topic to the extent it seeks information that is not relevant and exceeds the reasonable scope of third-party discovery

under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Topic to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not provide testimony referring or relating to unannounced or unreleased products. Apple further objects to this Topic to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above- captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple provides any testimony in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding this Topic.

TOPIC NO. 3:

The accuracy and authenticity of Exhibits 1 through 3.

OBJECTIONS AND RESPONSES TO TOPIC NO. 3:

Apple hereby incorporates the General Objections into its response to Topic No. 3 as if fully set forth herein. Apple further objects to this Topic at least for the following reasons:

Overly Broad and Unduly Burdensome: Third-party Apple objects to this Topic as overbroad and unduly burdensome. Specifically, the Topic fails to take reasonable steps to avoid imposing undue burden and expense on third-party Apple, and seeks testimony regarding information more appropriately obtained via less burdensome means of discovery (such as a declaration). Apple also objects to the extent that the Topic seeks information that is not

reasonably maintained and/or accessible by Apple in the ordinary course of business and/or that is not in the possession, custody, or control of Apple.

Privileged and Work Product Materials: Third-party Apple objects to this Topic to the extent that it seeks testimony protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not provide privileged or protected information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Topic to the extent it seeks information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple outweighs its likely benefit. For example, third- party Apple objects to this Topic to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not provide testimony referring or relating to unannounced or unreleased products. Apple further objects to this Topic to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above- captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple provides any testimony in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding this Topic.

TOPIC NO. 4:

Apple's communications with CardWare, Virtual Electric, Inc., and David Wyatt, or relating in any way to the Asserted Patents.

OBJECTIONS AND RESPONSES TO TOPIC NO. 4:

Apple hereby incorporates the General Objections, listed above. Third-party Apple further objects to this Topic at least for the following reasons:

Testimony Available Through Party Discovery: Apple objects to this Topic to the extent it seeks testimony more easily obtained from Plaintiff.

Overly Broad and Unduly Burdensome: Third-party Apple objects to this Topic as overbroad and unduly burdensome. Specifically, the Topic fails to take reasonable steps to avoid imposing undue burden and expense on third-party Apple, and seeks testimony regarding information more appropriately obtained via less burdensome means of discovery (such as a declaration). In addition, the Topic is not reasonably or narrowly tailored and is unbounded in time and is not limited to any subject matter relevant to the parties' claims or defenses in the underlying litigation. Apple also objects to the extent that the Topic seeks information that is not reasonably maintained and/or accessible by Apple in the ordinary course of business and/or that is not in the possession, custody, or control of Apple.

Privileged and Work Product Materials: Third-party Apple objects to this Topic to the extent that it seeks testimony protected by the attorney-client privilege, the attorney work product doctrine, the common interest privilege, or any other applicable privilege, immunity, or protection from discovery, including any third-party duty or obligation of non-disclosure, privacy, or confidentiality. Apple will not provide privileged or protected information, and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or of any work product immunity which may attach thereto.

Not Relevant Third-Party Discovery: Third-party Apple objects to this Topic to the extent it seeks information that is not relevant and exceeds the reasonable scope of third-party discovery under the Federal Rules. The burden and expense of the proposed discovery to third-party Apple

outweighs its likely benefit. For example, third- party Apple objects to this Topic to the extent that it seeks Apple's trade secrets, commercially sensitive information, and/or closely guarded research and development information. Apple will not provide testimony referring or relating to unannounced or unreleased products. Apple further objects to this Topic to the extent that it seeks documents, things, or information protected from disclosure, including pursuant to Federal Rule of Civil Procedure 26(c)(1)(G) and/or Federal Rule of Evidence 501. Defendants have not established that such sensitive and proprietary information and things are relevant to any party's claim or defense, or that it is proportional to the needs of the above- captioned case, considering the importance of the issues at stake, the amount in controversy, the parties' and Apple's relative access to relevant information, the parties' and third-party Apple's resources, and the importance of the discovery in resolving the issues. Furthermore, to the extent Apple provides any testimony in response to the Subpoena, such production will be subject to the Protective Order entered in this case, with Apple reserving the right to insist upon supplemental protections.

Subject to and without waiving the foregoing objections, Apple will meet and confer with Defendants regarding this Topic.

Dated this 23rd day of December, 2022

WALKER STEVENS CANNOM LLP

/s/ Bethany Stevens
Bethany Stevens

Attorneys for Non-Party Apple Inc.

CARDWARE EXHIBIT 2012
APPLE v. CARDWARE IPR2025-01146
Page 22 of 23

PROOF OF SERVICE

I declare that I am employed with the law firm of Walker Stevens Cannom LLP, whose address is 500 Molino Street, Suite 118, Los Angeles, CA 90013. I am not a party to the within action, and I am over the age of eighteen years. I further declare that on December 23, 2022, I caused to be served a copy of the foregoing on the following individual via electronic mail at the address listed below:

Robert Laurenzi
Paul Hastings LLP
robertlaurenzi@paulhastings.com

I declare under penalty of perjury that the foregoing is true and correct.

Dated: December 23, 2022

/s/ Bethany Stevens
Bethany Stevens

CARDWARE EXHIBIT 2012
APPLE v. CARDWARE IPR2025-01146
Page 23 of 23