**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

ST. GREGORY CATHEDRAL SCHOOL; ADK QUARTER MOON, LLC; LEXMI HOSPITALITY, LLC; and SHRI BALAJI, LLC, on behalf of themselves and all others similarly situated, Plaintiffs, v. LG ELECTRONICS, INC., a Republic of Korea corporation and LG ELECTRONICS, U.S.A., INC., a Delaware corporation, Defendants.	Case No. 6:12-CV-739 (MHS)

**""""""""JOINT PROTOCOL AND ORDER
RELATING TO THE USE OF PREDICTIVE CODING FOR
PRODUCTION OF ELECTRONICALLY STORED INFORMATION**

In accordance with the Agreed Order Regarding Electronically Stored Information (Docket No. 56, ¶ 8), Plaintiffs St. Gregory Cathedral School; ADK Quarter Moon, LLC; Lexmi Hospitality, LLC; and Shri Balaji, LLC ("Plaintiffs") and Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. ("Defendants") (collectively the "Parties") hereby agree to use "predictive coding" as a tool to assist in the production of electronically stored information ("ESI") and request that the Court approve the following Protocol to govern the use of predictive coding in this case.

A.   Scope

1. <u>General</u>. The procedures and protocols outlined herein govern the production of ESI by all parties to these proceedings, whether they are currently involved or become so in the

future. The Parties agree to take reasonable steps to comply with this Protocol for the production of ESI.

2. <u>Limitations</u>. Nothing in this Protocol shall (a) require disclosure of documents or information protected from disclosure by the attorney-client privilege, the work-product doctrine, or any other applicable privilege or immunity; (b) waive the Parties' rights to the attorney-client privilege, the work-product doctrine, or any other applicable privilege or immunity; or (c) require the Parties to disclose or produce privileged or irrelevant documents during the training process or any other part of the process (*see* Agreed Order Regarding Electronically Stored Information, Docket No. 56, ¶ 8). All documents and information produced pursuant to this Protocol are fully protected and covered as appropriate by the Court's Protective Order (Docket No. 84).

B.   Custodians and Phasing

1. <u>First Phase</u>. The Parties agree that the production of ESI pursuant to this Protocol will proceed in phases based on custodians. The first phase of the production of ESI will be based on the fifty-four custodians identified in Exhibit "A" to this Protocol.

2. <u>Subsequent Phases</u>. At the conclusion of the first phase, and any subsequent phase(s) thereafter, the Parties will meet and confer to determine whether further production of ESI for additional custodians is warranted and reasonable. If the Parties so agree, the Parties will determine which custodians to select for subsequent phase(s). If agreement cannot be reached, either Plaintiffs or Defendants may seek relief from the Court.

C.   Predictive Coding Review Process, Methodology, and Production

1. <u>General</u>. The processes and methodologies summarized below govern the search and review of ESI collected from Defendants' sources for each phase of the production of ESI. The

Parties agree that Defendants retain the right to review each document prior to production for relevance, confidentiality, and privilege.

2. <u>Predictive Coding Software</u>. Defendants will utilize text categorization software (the "text categorization program") provided by Deloitte Financial Advisory Services LLP ("Deloitte FAS") to search and review ESI for production in this case.

3. <u>Training Stage and Creation of the Training Set</u>. Defendants and Deloitte FAS will prepare documents collected from ESI sources from 2007 to October 4, 2012 that Defendants believe may contain relevant information for the text categorization program (the "Document Population") and then conduct the training stage for production of documents. The initial step in the training stage will be the creation of the training set of documents (the "Training Set").

(a)　　To create the Training Set, Defendants and Deloitte FAS will run keyword searches on the Document Population using keywords that Plaintiffs' counsel proposed by e-mail dated June 25, 2013. From these search results, Defendants and Deloitte FAS will take a random sample of documents using a 95% confidence level and confidence interval of plus or minus 2.5% and may add to that number other documents from the Document Population that Defendants have determined are responsive or non-responsive. Plaintiffs may provide Defendants with not more than 500 documents, including both responsive and non-responsive documents as determined by Plaintiffs, which shall be included in the Training Set. To the extent Plaintiffs provide responsive documents related to the Cottage Builders, Inc. v. LG Electronics U.S.A., Inc. case, such documents will be from those that are deemed produced by the parties or ordered by the Court to be produced in this (St. Gregory) action. These documents collectively will constitute the Training Set.

3

(b)   Defendants will review and code each document in the Training Set for responsiveness and privilege.

(c)   From that Training Set, the text categorization program will generate a "predictive model" that gives each document in the Document Population a "predictive score" from 0 to 1, with 0 being the most unlikely to be responsive and 1 being the most likely to be responsive.

4.   Testing.   Defendants and Deloitte FAS will test the performance of the predictive model as follows.

(a)   Defendants and Deloitte FAS will create a "Validation Set" to evaluate the predictive model's performance against attorney review.   The "Validation Set" will be a statistically valid random sample using a 95% confidence level and confidence interval of plus or minus 2.5% of un-reviewed but scored documents from the Document Population.   Defendants will review and code each document in the Validation Set for responsiveness and privilege in order to determine the performance of the predictive model.   Defendants agree to provide Plaintiffs with a report identifying the number of documents scored responsive and non-responsive in the Validation Set.

(b)   Defendants and Deloitte FAS will conduct an analysis of the results.   Using established performance metrics such as precision, recall, and f-measure, Defendants and Deloitte FAS will determine the stage at which the performance of the model has stabilized, i.e., the stage at which validation and retraining of the predictive model results in no material improvements.

(c)   Once Defendants and Deloitte FAS reasonably determine that the model has stabilized, then no additional training or testing will be done, and the predictive model will be

applied to the Document Population in accordance with the procedures outlined in Paragraph 5 below.

(d)   If Defendants and Deloitte FAS reasonably determine that the predictive model has not stabilized, then additional reviewed documents will be added to the Training Set, quality control measures will be utilized, and additional rounds of validation and retraining of the predictive model will be performed, until model stabilization is achieved; provided, however, that Defendants will not initially be required to run more than eight total rounds of validation and retraining.   If model stabilization is not achieved after eight total rounds of validation and retraining, the Parties will confer in good faith about how to proceed with the review and production of ESI and either party may seek judicial relief to resolve any dispute about how to proceed.

5. Application. Defendants and Deloitte FAS will apply the stabilized predictive model created through the procedures above to the Document Population. The predictive model will generate predictive scores for each document. The Parties agree that a recall rate of at least 90% is desirable, but given the uncertainties associated with the Document Population, Defendants will review documents until a recall rate of at least 75% is achieved, and Defendants will produce to Plaintiffs all such documents that are responsive and non-privileged. In doing so, Defendants will review documents in descending predictive order unless Defendants and Deloitte FAS reasonably determine that a departure from that order is warranted to more efficiently locate responsive documents.

To determine whether at least 75% recall has been achieved, Defendants and Deloitte FAS will take a random sample from all un-reviewed documents ("Stop Check Sample") using a 95% confidence level and confidence interval of plus or minus 2.5% and review those

documents for responsiveness and privilege. Defendants agree to provide Plaintiffs with a report identifying the number of documents scored responsive and non-responsive in the final Stop Check Sample taken to determine that 75% recall rate has been achieved.

In addition to attaining at least 75% recall, Defendants and Deloitte FAS will undertake other steps to assist with the accuracy and completeness of the review, including utilization of quality control techniques such as objective or bibliographic metadata analysis. Defendants will also confer in good faith with Plaintiffs regarding additional measures to improve the accuracy of the review.

D.   Production and Translation

1.   Defendants will produce documents on a rolling basis in accordance with the Parties' Agreed Order Regarding Electronically Stored Information (Docket No. 56).

2.   Going forward, the Parties may confer in good faith about sharing the cost of translating Korean-language documents into English.

E.   Costs

1. Except as otherwise provided herein, Defendants agree to bear all of the costs associated with their compliance with the terms of this Protocol, including the costs associated with the collection, review, and production of ESI hereunder.

2. Except as otherwise provided herein, Plaintiffs agree to bear all of the costs associated with their compliance with the terms of this Protocol. Plaintiffs also agree to bear all of the costs associated with their receipt and review of ESI produced hereunder.

3. Defendants and Plaintiffs reserve their rights to seek relief from the Court with respect to the cost of review and production of ESI to the extent permitted by applicable rules or law.

F.   General Provisions

1. Should any Party subsequently determine it cannot in good faith proceed as required by this Protocol, the Parties will meet and confer to resolve any disputes before seeking Court intervention.

2. Any practice or procedure set forth herein may be amended by written agreement of the Parties, where such amendment is deemed appropriate to facilitate the timely and economical exchange of ESI.

IT IS SO ORDERED.

SIGNED this 18th day of September, 2013.

MICHAEL H. SCHNEIDER
UNITED STATES DISTRICT JUDGE

Exhibit "A"
First Phase Custodians

1. Scott Stout	39. Hongrae Jeong
2. Mark Rogers	40. Jeung-hyun Bae
3. Don Fort	41. Moonyeon Sung
4. Donald "Don" Wojcik	42. Changhowi Joo
5. Jinseob "JS" Song	43. Kyosung Yoon
6. Charles Chung	44. Jaewoo Park
7. Steven Schmitt	45. Donghun Shin
8. Ross Banasik	46. Hyunho Seo
9. Courtney Gardner	47. Joongki Baek
10. Robert Giba	48. Min "Charlie" Ahn
11. Darren Gibula	49. Sinju Kim
12. Kevin McNamara	50. James Robinson
13. Steven Opromolla	51. Mel Harris
14. James "Jim" West	52. Juan Carlos "J.C." Rubi
15. Verne John	53. Dong Eun "Dustin" Lee
16. Tracey Janey	54. J. Kerry McIntyre
17. Nancy Grimm	
18. Peter Song	
19. Kelly Cutchins	
20. Jun-hyeung Park	
21. Sunki Park	
22. Terry Ko	
23. Jongil Kim	
24. Hyo Jae Cho	
25. Seungkook Kwon	
26. Jongsun Moon	
27. Donsoo Kim	
28. Su-huen Kim	
29. Tae-byeung Park	
30. Jong-ho Lee	
31. Sang-Keun Bak	
32. Jiyoung Seo	
33. Changu Kim	
34. Eunho Kim	
35. Donghoon Kang	
36. Seokhoon Jang	
37. Sanghun Lee	
38. Bros Kim	