

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SILICON LABORATORIES, INC.  
Petitioner

v.

CRESTA TECHNOLOGY CORPORATION  
Patent Owner

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Case IPR2015-00626  
Patent 7,265,792

Title: Broadband Receiver for Digital and Analog Television Signals

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**PETITIONER'S RESPONSE TO PATENT OWNER'S  
OBSERVATION ON CROSS EXAMINATION OF PETITIONER'S REPLY  
WITNESS, DR. DOUGLAS HOLBERG (PAPER NO. 32)**

Petitioner provides the following responses to each of the Patent Owner's "observations" on the recent deposition testimony of Petitioner's expert, Dr. Holberg. In general, Patent Owner's observations are unhelpful at best and completely irrelevant at worst.

**I. Dr. Holberg's New Testimony Regarding the Obviousness of Combination of Thomson, Harris and Grumman**

**Petitioner's Response:** There is nothing "new" about Dr. Holberg's testimony regarding the combination of Thomson, Harris, and Grumman. As discussed further below, many of the lines of questioning given below are on issues that Patent Owner does not even contest in this proceeding.

1. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Thomson explicitly describes a Finite Impulse Response ("FIR") filter. Instead, Petitioner relies on Harris for that teaching. The Board previously found this combination is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

2. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Thomson explicitly describes interruption of the television signal during a contact switch from one television format to another. Instead,

Petitioner relies on Birleson for that teaching. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

3. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Thomson explicitly describes such a delay. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris and Grumman.

4. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Harris teaches television signals. Instead, Petitioner relies on Thomson for that teaching. The Board previously found this combination is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

5. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Harris teaches processing more than one cell phone signal format in a single system. Instead, Petitioner relies on Thomson for processing multiple television formats. The Board previously found this combination is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding

that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

6. **Petitioner's Response:** The testimony cited is irrelevant. Petitioner has never contended that Harris teaches processing more than one cell phone signal format in a single system. Instead, Petitioner relies on Thomson for processing multiple television formats. The Board previously found this combination is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

7. **Petitioner's Response:** The testimony cited is irrelevant. Figure one of Harris is what it is; Petitioner has never contested that. Instead, Petitioner relies on Thomson for processing multiple television formats. The Board previously found this combination is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony

has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

8. **Petitioner's Response:** The testimony cited is irrelevant. The Board previously found the combination of Thomson and Harris is obvious in IPR2014-00728. In this trial, Patent Owner does not contest the Board's finding that it would have been obvious to use Harris's FIR filter to implement the adaptive bandpass filter of Thomson. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris, and Grumman.

9. **Petitioner's Response:** Patent Owner grossly mischaracterizes Dr. Holberg's testimony. Dr. Holberg did not testify that Grumman describes a "single FIR filter." He was not even asked about that in the question above. Instead he was asked whether Grumman describes a television format signal. However, that is irrelevant. Petitioner does not rely on Grumman for a television signal. Thomson provides that teaching, which Patent Owner does not dispute. As a result, this testimony has no bearing on whether Thomson teaches an adaptive filter or whether there is a reason to combine Thomson, Harris and Grumman.

10. **Petitioner's Response:** The testimony cited is irrelevant to the issue of whether Grumman describes one filter or two. Dr. Holberg goes to great lengths

in this reply declaration to refute Patent Owner's argument that Grumman describes a single filter function. This testimony does nothing to impugn his opinions.

11. **Petitioner's Response:** The testimony cited is irrelevant to the issue of whether Grumman describes one filter or two. Dr. Holberg goes to great lengths in this reply declaration to refute Patent Owner's argument that Grumman describes a single filter function. This testimony does nothing to impugn his opinions.

## **II. Dr. Holberg's New Testimony Regarding the Obviousness of Combination of Thomson, Harris and Zenith**

**Petitioner's Response:** There is nothing "new" about Dr. Holberg's testimony. Instead, he responded directly to the arguments raised by Patent Owner in its opposition. With respect to the meaning of "carrier signal," Dr. Holberg provided his opinion about the plain and ordinary meaning of that term in response to Patent Owner's argument that Zenith's sync signal is not a "carrier signal." Dr. Holberg cited to the Balaban reference—a prior art patent submitted by the applicant during prosecution—as evidence in support of his opinion that a synchronization signal is considered a "carrier signal" by a POSITA.

1. **Petitioner's Response:** The testimony cited is irrelevant. Dr. Holberg never testified that the sync detector in Zenith detected a sync signal in the digital television signal. Instead, he testified that Zenith detects "the absence" of a sync signal in the digital television signal, just as in the '585 patent. As a result, this

testimony has no bearing on Petitioner's argument that Zenith teaches the claimed standard selection circuit.

2. **Petitioner's Response:** The testimony cited is irrelevant. Dr. Holberg never testified that the sync detector in Zenith detected a sync signal in the digital television signal. Instead, he testified that Zenith detects "the absence" of a sync signal in the digital television signal, just as in the '585 patent. As a result, this testimony has no bearing on Petitioner's argument that Zenith teaches the claimed standard selection circuit.

3. **Petitioner's Response:** The testimony cited is irrelevant. Dr. Holberg never testified that the sync detector in Zenith detected a sync signal in the digital television signal. Instead, he testified that Zenith detects "the absence" of a sync signal in the digital television signal, just as in the '585 patent. As a result, this testimony has no bearing on Petitioner's argument that Zenith teaches the claimed standard selection circuit.

### **III. Dr. Holberg's New Testimony Regarding the a claim construction of "indicative of"**

**Petitioner's Response:** There is nothing "new" about Dr. Holberg's testimony. Instead, he responded directly to the arguments raised by Patent Owner in its opposition. With respect to the meaning of "indicative of," Dr. Holberg simply agreed with Patent Owner that the dictionary submitted by Patent Owner (Ex. 2034) reflected the plain and ordinary meaning of that term to a POSITA.

1. **Petitioner's Response:** This testimony supports rather than detracts from Dr. Holberg's opinion that the plain and ordinary meaning of the "select signal" only requires that signal to provide "a clue, evidence or hint" about the actual format of the television signal. It does not have to be conclusive, as Patent Owner apparently contends.

2. **Petitioner's Response:** This testimony supports rather than detracts from Dr. Holberg's opinion that the plain and ordinary meaning of the "select signal" may be a single bit. The claim language only requires the select signal to specific one of a "plurality," which includes two different formats. A single bit can represent one of two different formats.

3. **Petitioner's Response:** This testimony supports rather than detracts from Dr. Holberg's opinion that the plain and ordinary meaning of the "select signal" only requires that signal to provide "a clue, evidence or hint" about the actual format of the television signal. It does not have to be conclusive, as Patent Owner apparently contends.

**IV. Dr. Holberg's New Testimony Regarding the a [sic] claim construction of "carrier signal":**

**Petitioner's Response:** There is nothing "new" about Dr. Holberg's testimony. Instead, he responded directly to the arguments raised by Patent Owner in its opposition. With respect to the meaning of "carrier signal," Dr. Holberg provided his opinion about the plain and ordinary meaning of that term in response to Patent



Owner's argument that Zenith's sync signal is not a "carrier signal." Dr. Holberg cited to the Balaban reference—a prior art patent submitted by the applicant during prosecution—as evidence in support of his opinion that a synchronization signal is considered a "carrier signal" by a POSITA.

1. **Petitioner's Response:** The testimony cited is irrelevant to Dr. Holberg's opinion about the plain and ordinary meaning of "carrier signal." The Balaban reference—a prior art patent submitted by the applicant during prosecution—teaches that a synchronization signal is considered a "carrier signal" by a POSITA.

Dated: May 23, 2016

/s/ Peter J. Ayers

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**CERTIFICATE OF SERVICE**

I hereby certify that on this 23rd day of May, 2016, the foregoing **PETITIONER'S RESPONSE TO PATENT OWNER'S OBSERVATION ON CROSS EXAMINATION OF PETITIONER'S REPLY WITNESS, DR. DOUGLAS HOLBERG (PAPER NO. 32)** was served upon Patent Owner's attorney of record by emailing to the following addresses:

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