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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

ATMEL CORPORATION, a Delaware corporation; ATMEL SWITZERLAND, a corporation; ATMEL FRANCE, a corporation; and ATMEL SARL, a corporation,

Plaintiffs,

v.

AUTHENTEC, INC., a Delaware corporation,

Defendant.

Case No. 06 CV 2138 CW

**DECLARATION OF PETER SHERLOCK**

Date: May 1, 2008
Time: 2:00 p.m.
Location: Courtroom 2, 4th Floor
Judge: Hon. Claudia Wilken

I, Peter Sherlock, declare as follows:

1. I am the Vice President of Product Development at AuthenTec, Inc. I have worked at AuthenTec since February 1999. I am responsible for day-to-day execution of product development for AuthenTec and was involved with the development of each of AuthenTec's accused AES products. I make this declaration of my personal knowledge, and if called as a witness, I could and would testify competently to the statements contained herein.

2. AuthenTec's accused AES products do not use temperature or pressure sensitivity to read the fingerprint. AuthenTec's accused AES products do not have a sensing surface that transmits patterns of pressure or temperature variation between the ridges and valleys.

3. AuthenTec's accused AES products read below the surface of the skin. They use radio-frequency signals generated by an external excitation source to detect fingerprint patterns from the live, highly-conductive layer of skin that lies just beneath the skin's dry outer surface layer.

4. The surface of the finger is composed of a layer of dead skin cells that are formed in the shape of a fingerprint pattern. On the inside of the finger is a layer of living cells that regenerate the skin's surface as it wears down. This live, inside layer is where the shape of the fingerprint pattern originates. It is separated from the dead skin by an electrically conductive layer.

5. AuthenTec's accused AES products read the live layer below the surface of the skin by injecting a small radio-frequency signal into the finger using a transmitter connected to a drive ring or electrode.

6. The drive ring is separate from the portion of AuthenTec's accused AES products that senses the electric field.

7. The drive ring must be contacted either physically or electrically to drive the radio-frequency signal into the finger. The accused AES products will not work without the drive ring because it is necessary to generate an electric field in the finger. Pressing on the detection matrix with a finger not energized by the drive ring will yield no result.

8. AuthenTec's accused AES products sense the electric field with an array of pixel antenna plates, which is referred to as the detection matrix in AuthenTec's datasheets.

9. This array of pixel antenna plates in the AES accused products reads the strength of the electric field that is formed between the sensor and the ridge and valley structure inside the finger.

10. This method of reading the live layer of skin in a finger using radio-frequency signals is known as TruePrint™ technology.

11. The drive ring for AuthenTec's accused AES products is manufactured at a separate facility after wafer processing is complete by either depositing a layer of metal on the surface of the completed wafer or attaching a metal bezel to the packaging for the otherwise completed device.

12. Attached as Exhibit A is a true and correct copy of a document labeled AUTH-A016055 that I understand was produced during this litigation. Exhibit A accurately depicts the concepts involved in the operation of AuthenTec's accused AES products as described above.

13. Attached as Exhibit B is a true is a true and correct copy of a document labeled AUTH-A016054 that I understand was produced during this litigation. Exhibit B accurately depicts the concepts involved in the operation of AuthenTec's accused AES products as described above.

14. Attached as Exhibit C is a true and correct copy of a diagram available on AuthenTec's publicly-accessible website at http:www.authentec.com/i/iTruePrint_Cross.jpg. Exhibit C accurately depicts the concepts involved in the operation of AuthenTec's accused AES products as described above.

15. Although I understand that the proposed claim construction is disputed, I am informed that Atmel asserts that "contact sensitive elements" should be interpreted to be "two or more component parts that are responsive to finger contact between a finger and the sensing surface of the sensor wherein the sensor is integrated into a semiconductor substrate and is not an optical sensor." I am further informed that Atmel asserts that the "sensing surface" should be interpreted to be "a surface of the sensor that detects finger contact wherein the sensor is integrated into a semiconductor substrate and is not an optical sensor" and that sensing surface is a surface that is coupled to the "matrix of contact sensitive elements." Finally, I have been informed that Atmel identifies the detection matrix, described above, as the alleged "contact sensitive elements" in the accused AES products.

16. As described above, the pixel antenna array in the AES products is not responsive to contact between a finger and the sensing surface as defined by Atmel. Moreover, the surface of the

sensor that is coupled to the detection matrix does not detect finger contact. The drive ring, described above, is not coupled to the detection matrix. Moreover, the drive ring in the accused AES products does not detect finger contact.

Executed at Melbourne, Florida on February 29, 2008.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Peter Sherlock