

**CERTIFICATE OF AMENDMENT
OF THE
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SENESCO TECHNOLOGIES, INC.**

*Pursuant to Sections 228 and 242
of the
Delaware General Corporation Law*

Senesco Technologies, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL");

DOES HEREBY CERTIFY THAT:

FIRST: The name of the corporation (hereinafter, the "Corporation") is:

Senesco Technologies, Inc.

SECOND: The Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of Delaware on January 22, 2007 (the "Restated Certificate"), a Certificate of Amendment of the Restated Certificate was filed with the office of the Secretary of State of Delaware on each of December 13, 2007 and September 22, 2009 and two Certificates of Designations were filed with the office of the Secretary of State of Delaware on March 31, 2010 (the "Amendment" together with the Restated Certificate, the "Charter").

THIRD: The Charter is hereby amended as follows:

- (a) The first section of Article FOURTH of the Charter is hereby deleted in its entirety and replaced by the following new paragraph:

"The total number of shares of all classes of stock which the Corporation shall have authority to issue is Two Hundred Fifty Five Million (255,000,000) shares. The Corporation is authorized to issue two classes of stock designated "Common Stock" and "Preferred Stock," respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is Two Hundred Fifty Million (250,000,000), each such share of Common Stock having a \$0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having a \$0.01 par value."

FOURTH: That the foregoing amendments have been duly adopted in accordance with the provisions of Sections 228 and 242 of the DGCL.

FIFTH: This Certificate of Amendment shall be deemed effective upon its filing with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, this Certificate of Amendment of the Certificate of Incorporation has been duly executed by the undersigned officer of the Corporation this 25th day of May, 2010.

SENESCO TECHNOLOGIES, INC.

By: /s/ Joel Brooks

Name: Joel Brooks

Title: Chief Financial Officer, Treasurer and Secretary