IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS
OF ENGLAND & WALES
INTELLECTUAL PROPERTY LIST
(ChD)
PATENTS COURT

Claim No: HP-2016-000046

B E T W E E N:

(1) PHILIPS LIGHTING NORTH AMERICA CORPORATION
(a company incorporated under the laws of the USA)

(2) PHILIPS LIGHTING HOLDING B.V.
(a company incorporated under the laws of the Netherlands)

Claimants

-and-

(1) MEGAMAN (UK) LIMITED

(2) NEONLITE INTERNATIONAL LIMITED

(3) NEONLITE ELECTRONIC & LIGHTING (HK) LIMITED
(a company incorporated under the laws of Hong Kong)

Defendants

ANNEX B – CONDITIONAL AMENDMENT 1 (EP836)

The proposed conditional amendments to European Patent (UK) No. 1 887 836 ("**EP836**") in accordance with Conditional Amendment 1 are as follows:-

Conditional Amendments to the Claims of EP836		
Old Claim	**New Claim**	**Conditional Amendment**
1	1	A dimmable lighting device (150, 180, 200) comprising: at least one LED; and a power converter coupled to the at least one LED and configured to provide DC power to the at least one LED, wherein the lighting device is a light bulb150, 180, 200) and the at

		least one LED and the power converter are provided within the light bulb (150, 180,200); characterised in that the power converter is configured to receive power, from a dimming control, in the form of ~~a variable amplitude AC signal or~~ a chopped AC waveform, and convert the received power into DC power for the at least one LED.
2	2	A dimmable lighting device (150, 180, 200) according to claim 1, wherein a plurality of LEDs is provided.
3	3	A dimmable lighting device (150, 180, 200) according to any preceding claim, wherein the lighting device comprises control circuitry and the power converter is arranged to provide the DC power to the control circuitry as well as to the at least one LED.
4	4	A dimmable lighting device (150, 180, 200) according to claim 3, wherein the control circuitry comprises digital components and the power converter is adapted to maintain a constant DC power supply for said digital components.
5	5	A dimmable lighting device (150, 180, 200) according to claims 3 or 4, wherein the control circuitry is adapted to analyze the received power and make adjustments to light output from the at least one LED based on said analysis.
6	6	A dimmable lighting device (150, 180, 200) according to claim 5, wherein the control circuitry is adapted to generate colors, patterns of light, or other illumination effects in response to variations in the received power from the dimming control.
7	7	A dimmable lighting device (150, 180, 200) according to claim 6, wherein the control circuitry is adapted to change color and intensity of light output from the at least one LED simultaneously.
8	8	A dimmable lighting device (150, 180, 200) according to any one of claims 3 to 7, wherein the control circuitry is adapted to make adjustments to light output from the at least one LED based on voltage changes in the received power from the dimming control.
9	9	A dimmable lighting device (150, 180, 200) according to any preceding claim, wherein the lighting device comprises an analog-to-

		digital converter arranged to digitize a waveform of the received power from the dimming control.
10	10	An illumination method, comprising: receiving, at the power converter of the dimmable lighting device (150, 180, 200) of any one of claims 1 to 5, 8 and 9, power from a dimming control in the form of ~~a variable amplitude AC signal or~~ a chopped AC waveform; converting the received power into DC power for at least one LED; and providing the D.C. power to the at least one LED
11	11	An illumination method according to claim 10, wherein colors, patterns of light, or other illumination effects are generated in response to variations in the received power from the dimming control.
12	12	An illumination method according to claim 11, wherein changes in color and intensity of light output from the at least one LED occur simultaneously in response to variations in the received power from the dimming control.

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ANNEX C – CONDITIONAL AMENDMENT 2 (EP836)

The proposed conditional amendments to European Patent (UK) No. 1 887 836 ("**EP836**") in accordance with Conditional Amendment 2 are as follows:-

Conditional Amendments to the Claims of EP836		
Old Claim	**New Claim**	**Conditional Amendment**
1	1	A dimmable lighting device (150, 180, 200) comprising: at least one LED; and a power converter coupled to the at least one LED and configured to provide DC power to the at least one LED, wherein the lighting device is a light bulb150, 180, 200) and the at

		least one LED and the power converter are provided within the light bulb (150, 180,200); characterised in that the power converter is configured to receive power, from a dimming control, in the form of a variable amplitude AC signal or a chopped AC waveform, and convert the received power into DC power for the at least one LED, and wherein the dimming control is a dimmer on a wall.
2	2	A dimmable lighting device (150, 180, 200) according to claim 1, wherein a plurality of LEDs is provided.
3	3	A dimmable lighting device (150, 180, 200) according to any preceding claim, wherein the lighting device comprises control circuitry and the power converter is arranged to provide the DC power to the control circuitry as well as to the at least one LED.
4	4	A dimmable lighting device (150, 180, 200) according to claim 3, wherein the control circuitry comprises digital components and the power converter is adapted to maintain a constant DC power supply for said digital components.
5	5	A dimmable lighting device (150, 180, 200) according to claims 3 or 4, wherein the control circuitry is adapted to analyze the received power and make adjustments to light output from the at least one LED based on said analysis.
6	6	A dimmable lighting device (150, 180, 200) according to claim 5, wherein the control circuitry is adapted to generate colors, patterns of light, or other illumination effects in response to variations in the received power from the dimming control.
7	7	A dimmable lighting device (150, 180, 200) according to claim 6, wherein the control circuitry is adapted to change color and intensity of light output from the at least one LED simultaneously.
8	8	A dimmable lighting device (150, 180, 200) according to any one of claims 3 to 7, wherein the control circuitry is adapted to make adjustments to light output from the at least one LED based on voltage changes in the received power from the dimming control.
9	9	A dimmable lighting device (150, 180, 200) according to any

		preceding claim, wherein the lighting device comprises an analog-to-digital converter arranged to digitize a waveform of the received power from the dimming control.
10	10	An illumination method, comprising: receiving, at the power converter of the dimmable lighting device (150, 180, 200) of any one of claims 1 to 5, 8 and 9, power from a dimming control in the form of a variable amplitude AC signal or a chopped AC waveform; converting the received power into DC power for at least one LED; and providing the D.C. power to the at least one LED, and wherein the dimming control is a dimmer on a wall.
11	11	An illumination method according to claim 10, wherein colors, patterns of light, or other illumination effects are generated in response to variations in the received power from the dimming control.
12	12	An illumination method according to claim 11, wherein changes in color and intensity of light output from the at least one LED occur simultaneously in response to variations in the received power from the dimming control.

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ANNEX D – CONDITIONAL AMENDMENT 3 (EP836)

The proposed conditional amendments to European Patent (UK) No. 1 887 836 ("**EP836**") in accordance with Conditional Amendment 3 are as follows:-

Conditional Amendments to the Claims of EP836		
Old Claim	**New Claim**	**Conditional Amendment**
1	1	A dimmable lighting device (150, 180, 200) comprising: at least one LED; and a power converter coupled to the at least one LED and configured to provide DC power to the at least one LED, wherein the lighting device is a light bulb150, 180, 200) and the at

		least one LED and the power converter are provided within the light bulb (150, 180, 200); characterised in that the power converter is configured to receive power, from a dimming control, in the form of a variable amplitude AC signal or a chopped AC waveform, and convert the received power into DC power for the at least one LED.
2	2	A dimmable lighting device (150, 180, 200) according to claim 1, wherein a plurality of LEDs is provided.
3	3	A dimmable lighting device (150, 180, 200) according to any preceding claim, wherein the lighting device comprises control circuitry and the power converter is arranged to provide the DC power to the control circuitry as well as to the at least one LED, and wherein the control circuity comprises a processor.
4	4	A dimmable lighting device (150, 180, 200) according to claim 3, wherein the control circuitry comprises digital components and the power converter is adapted to maintain a constant DC power supply for said digital components.
5	5	A dimmable lighting device (150, 180, 200) according to claims 3 or 4, wherein the control circuitry is adapted to analyze the received power and make adjustments to light output from the at least one LED based on said analysis.
6	6	A dimmable lighting device (150, 180, 200) according to claim 5, wherein the control circuitry is adapted to generate colors, patterns of light, or other illumination effects in response to variations in the received power from the dimming control.
7	7	A dimmable lighting device (150, 180, 200) according to claim 6, wherein the control circuitry is adapted to change color and intensity of light output from the at least one LED simultaneously.
8	8	A dimmable lighting device (150, 180, 200) according to any one of claims 3 to 7, wherein the control circuitry is adapted to make adjustments to light output from the at least one LED based on voltage changes in the received power from the dimming control.
9	9	A dimmable lighting device (150, 180, 200) according to any

		preceding claim, wherein the lighting device comprises an analog-to-digital converter arranged to digitize a waveform of the received power from the dimming control.
10	10	An illumination method, comprising: receiving, at the power converter of the dimmable lighting device (150, 180, 200) of any one of claims 1 to 5, 8 and 9, power from a dimming control in the form of a variable amplitude AC signal or a chopped AC waveform; converting the received power into DC power for at least one LED; and providing the D.C. power to the at least one LED.
11	11	An illumination method according to claim 10, wherein colors, patterns of light, or other illumination effects are generated in response to variations in the received power from the dimming control.
12	12	An illumination method according to claim 11, wherein changes in color and intensity of light output from the at least one LED occur simultaneously in response to variations in the received power from the dimming control.