

CLAIMS**1. A lighting system comprising:**

a first lighting circuit configured to provide a first predetermined level of lighting intensity and to receive power from a mains electricity supply or from a battery source if said mains supply is unavailable, said first lighting circuit connected to at least one first light source and configured, when actuated, to provide lighting at said first predetermined level of lighting intensity wherein said first light source is in either an on or off state or at a level of light required to raise ambient light levels above a predetermined level; and

a second lighting circuit configured to provide lighting at at least a second predetermined level of lighting intensity, said second lighting circuit configured to receive power from a mains electricity supply and being connected to at least one second light source, said second lighting circuit having at least one sensor input such that actuation of said sensor causes said second light source to provide said second predetermined level of lighting intensity; for a predetermined period of time; in response to ambient illumination meeting or exceeding a predetermined intensity; when said sensor has no input or has had no input for a predetermined period of time; or until re-set;

wherein said second predetermined level of lighting intensity is greater than said first predetermined level of lighting.

2. A lighting system according to claim 1 wherein said first light source lighting intensity is sufficient in response to a background lighting intensity to maintain an energy or background lighting intensity at a predetermined intensity level.**3. A lighting system according to claim 1 or 2 wherein:**

said first and second light sources each include a plurality of LED light elements;

said first lighting circuit includes a charger receiving mains electricity input and an output connected to said battery and includes a charge controller connected to said battery, said battery being connected to a first first-circuit LED driver circuit configured to control power to said first LED light source when under battery power and for when operating under mains electricity

power said first lighting circuit further includes a second first-circuit LED light driver connected to said mains electricity supply and an output connected to said first LED light source such that said second first-circuit LED driver circuit is configured to drive said first LED light source when mains electricity is available; and

said second lighting circuit including a power converter having mains electricity input and an output connected to an input of a first second-circuit LED driver circuit having an output connected to said second LED light source;

wherein said second predetermined level of lighting intensity is provided at some constant predetermined intensity, or it is variable to compensate for a non-fixed ambient lighting intensity to provide an area with a predetermined level of lighting intensity when ambient lighting is inadequate.

4. A lighting system according to claim 1 or 2 wherein said first light source is configured to either emit light or to not emit light when said second light source is actuated to provide said second predetermined level of lighting intensity; and/or wherein said lighting system only provides said second level of predetermined lighting intensity when said sensor is a motion sensor or a sensor detecting the presence of an object receiving input that an adjacent area is being occupied.
5. A lighting system according to any one of claims 1 to 4 wherein said first lighting circuit includes a photovoltaic sensor input to allow actuation of said first light source only if an ambient light level is below a predetermined level.
6. A lighting system according to any one of claims 1 to 5 wherein said second lighting circuit includes a photovoltaic sensor input to allow actuation of said second light source only if an ambient light level is below a predetermined level.
7. A lighting system according to any one of claims 1 to 6 wherein said sensor of said second lighting circuit is a photovoltaic sensor, an infra-red or motion detector or a microwave sensor.
8. A lighting system according to any one of claims 1 to 7 wherein said first and/or second light sources each include two or more groups of LED light elements.

9. A lighting system according to any one of claims 1 to 8 wherein said system includes a camera configured to record images in response to operation of said second light source, or includes an alarm configured to actuate in response to operation of said second light source.
10. A lighting system according to any one of claims 1 to 9 wherein said first and second lighting circuits are configured to provide no lighting if ambient light levels exceed first and second predetermined lighting intensity levels respectively.
11. A lighting system according to any one of claims 1 to 10 wherein said first lighting circuit including a sensor input such that actuation thereof actuates said first light source.
12. A lighting system according to any one of claims 1 to 11 wherein said first light source is configured to provide said first predetermined level of lighting intensity corresponding to an emergency lighting intensity level.
13. A lighting system according to any one of claims 1 to 13 wherein said first and second lighting circuits provide, when actuated, sufficient level of lighting intensity to increase ambient lighting to some predetermined level.

14. An emergency lighting system comprising:

a first lighting circuit connected to at least one LED lighting element and a mains electricity supply or a battery source such that if the mains supply is unavailable the first circuit LED is actuated to provide light at a first predetermined emergency level;

a second lighting circuit connected to at least one LED lighting element and configured to provide lighting at a second predetermined light intensity, said second lighting circuit connects to the mains electricity supply and having a sensor input whereby actuation thereof causes illumination of the second circuit LED; and

wherein the second lighting intensity is greater than the emergency level light intensity.

15. A system according to claim 14 wherein:

the first lighting circuit including a charger receiving mains electricity input and an output connected to the battery source, a charge controller, the battery connected to a first circuit LED driver configured to control battery power provided to the first circuit LED; and

power converter associated with the second lighting circuit, the power converter having mains supply input and an output connected to the input of a second circuit LED driver having an output connected to the second circuit LED.

CLAIMS

1. An emergency lighting system comprising:
 - a first lighting circuit connected to at least one LED lighting element and configured to be connected to a mains electricity supply and to a battery source such that if the mains supply is unavailable the first circuit LED is actuated to provide a first predetermined emergency level light intensity;
 - a second lighting circuit connected to at least one LED lighting element and configured to provide lighting at a second predetermined light intensity, said second lighting circuit configured to be connected to the mains electricity supply and having a sensor input whereby actuation thereof causes illumination of the second circuit LED;
 - and
 - wherein the second lighting intensity is greater than the emergency level light intensity.

2. A system according to claim 1 wherein:
 - the first lighting circuit includes:
 - a charger for receiving mains electricity input and having an output configured to be connected to the battery source, a charge controller,
 - a first circuit LED driver configured to receive power from the battery source and to control battery power provided to the first circuit LED; and
 - the second lighting circuit includes a power converter having a mains supply input and an output connected to the input of a second circuit LED driver having an output connected to the second circuit LED.

3. A lighting system comprising:
 - a first lighting circuit configured to provide a first predetermined level of lighting intensity to an area and to receive power from a mains electricity supply or from a battery source if said mains supply is unavailable, said first lighting circuit connected to at least one first light source and configured, when actuated, to provide lighting at said first predetermined level of lighting intensity wherein said first light source is in either an on or off state or at a level of light required to raise ambient light levels above a predetermined level; and
 - a second lighting circuit configured to provide lighting to said area at least a second predetermined level of lighting intensity, said second lighting circuit configured

to receive power from a mains electricity supply and being connected to at least one second light source, said second lighting circuit having at least one sensor input such that actuation of said sensor causes said second light source to provide said second predetermined level of lighting intensity:

for a predetermined period of time;

in response to ambient illumination being below a predetermined intensity;

until said sensor has no input or has had no input for a predetermined period of time; or until re-set;

wherein said second predetermined level of lighting intensity is greater than said first predetermined level of lighting intensity.

4. A lighting system according to any of claims 1 to 3 wherein said first light source lighting intensity is sufficient in response to a background lighting intensity to maintain a background lighting intensity at a predetermined intensity level.

5. A lighting system according to any of claims 1 to 4 wherein:

said first and second light sources each include a plurality of LED light elements;
said first lighting circuit includes:

a charger configured to receive a mains electricity input and having an output for charging said battery source;

a charge controller configured to be connected to said battery source, said battery source being configured to be connected to a first first-circuit LED driver circuit configured to control power to said first LED light source when under battery power;
and

said first lighting circuit further includes a second first-circuit LED light driver configured to be connected to said mains electricity supply and having an output connected to said first LED light source such that said second first-circuit LED driver circuit is configured to drive said first LED light source when mains electricity is available; and

said second lighting circuit including a power converter having a mains electricity input and an output connected to an input of a first second-circuit LED driver circuit having an output connected to said second LED light source;

wherein said second predetermined level of lighting intensity is provided at some constant predetermined intensity, or it is variable to compensate for a non-fixed ambient

lighting intensity to provide said area with a predetermined level of lighting intensity when ambient lighting is inadequate.

6. A lighting system according to any of claims 1 to 4 wherein said first light source is configured to
either emit light or to not emit light when said second light source is actuated to provide said second predetermined level of lighting intensity; and/or wherein said lighting system only provides said second level of predetermined lighting intensity when said sensor is a motion sensor or a sensor detecting the presence of an object receiving input that said area is being occupied.
7. A lighting system according to any preceding claim wherein said first lighting circuit includes a photovoltaic sensor input to allow actuation of said first light source only if an ambient light level is below a predetermined level.
8. A lighting system according to any preceding claim wherein said second lighting circuit includes a photo voltaic sensor input to allow actuation of said second light source only if an ambient light level is below a predetermined level.
9. A lighting system according to any preceding claim wherein said sensor of said second lighting circuit is a photovoltaic sensor, an infra-red or motion detector or a microwave sensor.
10. A lighting system according to any preceding claim wherein said first and/or second light sources each include two or more groups of LED light elements.
11. A lighting system according to any preceding claim wherein said system includes a camera configured to record images of said area in response to operation of said second light source, or includes an alarm configured to actuate in response to operation of said second light source.
12. A lighting system according to any preceding claim wherein said first and second lighting circuits are respectively configured to provide no lighting if ambient light levels exceed first and second predetermined lighting intensity levels respectively.

13. A lighting system according to any preceding claim wherein said first lighting circuit including a sensor input such that actuation thereof actuates said first light source.
14. A lighting system according to any preceding claim wherein said first light source is configured to provide said first predetermined level of lighting intensity corresponding to an emergency lighting intensity level.
15. A lighting system according to any preceding claim wherein said first and second lighting circuits provide, when actuated, a level of lighting intensity to increase ambient lighting to some predetermined level.
16. A lighting system substantially as herein described with reference to Figure 1, Figure 2, Figure 3, or Figure 4 of the accompanying drawings.