CLAIMS:

1. A thermal signature generating device, the device comprising:

at least one thermal radiation emitting element, each of the at least one thermal radiation emitting elements extending between two spaced-apart opposite solid surfaces defined by two opposite electrodes and comprising an array of Carbon Nanotubes (CNTs), the array being connected by its two opposite ends to said two opposite electrodes, respectively, and extending along a space between the electrodes, the electrodes providing electrical current through the thermal radiation emitting element, causing the thermal radiation emitting element to emit thermal radiation for generating the thermal signature.

2. The device of claim 1, wherein a majority of a surface area of the thermal radiation emitting element is not in contact with any solid surface.

3. The device of claim 1, wherein the array of CNTs is configured with an aspect ratio between cross-sectional dimensions of two surface regions of the two electrodes on which the ends of the array are mounted and length of the array defined by the space between the electrodes, the ~~cross-~~cross-sectional dimension of each of said two surface regions being larger than the space between the electrodes.

4. The device of ~~any one of~~ claim~~s~~ 1 ~~to 3~~, wherein the electrical current through the thermal radiation emitting element flows along a direction between the electrodes in alignment with the lengths of fibers of the CNTs.

~~5. The device of any one of claims 1 to 4, wherein the electrodes are configured to serve as heat sinks for removing heat generated by the thermal radiation emitting element.~~

~~6.~~5. The device ~~according to any one~~ of ~~the preceding~~ claim~~s~~ 1, further comprising a control unit configured and operable to generate control signals to control the electrical current through said at least one thermal radiation emitting element in accordance with the thermal signature to be generated, said control signals having a

predetermined pattern corresponding to at least a predetermined temporal modulation of the electrical current.

~~7.~~6. The device of claim 1, further comprising a housing comprising the electrodes and the thermal radiation emitting element, and wherein at least part of the housing enables thermal radiation passage therethrough.

~~8. The device of claim 7, wherein the housing further comprises at least one heat sink for removing heat generated by the thermal radiation emitting element.~~

~~9. The device of claim 7, wherein the housing provides a vacuumed environment for the thermal radiation emitting element.~~

~~10. The device of claim 7, wherein the at least part of the housing that enables thermal radiation passage therethrough is made of one or more of the following materials: germanium, Teflon, silicon, zinc selenide or polyethylene.~~

~~11. The device of claim 7, wherein a shape of the thermal radiation emitting element is a flat surface, and wherein the housing comprises a marking instructing a user of a connection direction of connecting the housing to a fuse holder for providing thermal radiation at desired directions.~~

~~12. The device of claim 1, wherein the thermal radiation emitting element has one of the following shapes: a spiral, a cylinder, a fiber or a flat surface.~~

~~13.~~7. The device of claim ~~7~~6, wherein the housing is shaped as a fuse enabling detachably connecting the housing to a fuse holder.

~~14. The device of claim 13, wherein the housing and the fuse holder meet the DIN 72581 standard.~~

~~15. The device of claim 13, wherein the fuse holder is capable of providing the electrical current to the electrodes.~~

~~16. The device of claim 13, wherein the fuse holder comprises a reflector for directing the thermal radiation towards desired directions.~~

~~17. The device of claim 13, wherein the fuse holder is connected to a reflective surface for reflecting the thermal radiation towards desired directions.~~

~~18. The device of claim 17, wherein upon connecting the housing to the fuse holder, the housing is located within a substrate of the reflective surface, the substrate being designed to reflect the thermal radiation towards the desired directions.~~

~~19. The device of claim 1, further comprising a male connector enabling detachably connecting the device to a female connector irrespective of an angle of rotation of the male connector around an axis of the male connector perpendicular to the female connector.~~

~~20. The device of claim 1, wherein the at least one thermal radiation emitting element is a plurality of thermal radiation emitting elements, wherein each thermal radiation emitting element of the plurality of thermal radiation emitting elements emits thermal radiation in a given direction, so that at least one of the thermal radiation emitting elements emits first thermal radiation in a first direction and at least another one of the thermal radiation emitting elements emits second thermal radiation in a second direction, other than the first direction.~~

~~21. The device of claim 6, wherein the pattern is a pre-defined pattern.~~

~~22.~~8. The device of claim 1, wherein the thermal signature is generated for marking one or more objects.

~~23.~~9. The device of claim 6, further comprising a thermographic camera capable of determining a heatmap of an area of interest, and wherein the pattern is generated to match the heatmap.

~~24.~~10. The ~~system~~ device of claim ~~23~~9, wherein the pattern is generated in order to camouflage an object located between a viewer and the area of interest.

~~25.~~11. A thermal signature generating method, the method comprising:

providing electrical current through at least one thermal radiation emitting element, causing the at least one thermal radiation emitting element to emit thermal radiation for generating a thermal signature, wherein each of the at least one thermal radiation emitting elements extends between two spaced-apart opposite solid surfaces defined by two opposite electrodes and comprises an array of Carbon Nanotubes (CNTs), the array being connected by its two opposite ends to said two opposite electrodes, respectively, and extending along a space between the electrodes, the electrodes providing the electrical current through the thermal radiation emitting element.

~~26.~~12. The method of claim ~~25~~11, wherein a majority of a surface area of the thermal radiation emitting element is not in contact with any solid surface.

~~27.~~13. The method of claim ~~25~~11, wherein the array of CNTs is configured with an aspect ratio between cross-sectional dimensions of two surface regions of the two electrodes on which the ends of the array are mounted and length of the array defined by the space between the electrodes, the ~~cross~~ cross-sectional dimension of each of said two surface regions being larger than the space between the electrodes.

~~28.~~14. The method of ~~any one of~~ claim~~s~~ 11 ~~25 to 27~~, wherein the electrical current through the thermal radiation emitting element flows along a direction between the electrodes in alignment with the lengths of fibers of the CNTs.

~~29. The method of any one of claims 25 to 28, wherein the electrodes are configured to serve as heat sinks for removing heat generated by the thermal radiation emitting element.~~

~~30.~~15. The method of ~~any one of~~ claim~~s 25 to 29~~ 11, further comprising:

generating control signals to control the electrical current through said at least one thermal radiation emitting element in accordance with the thermal signature to be generated, said control signals having a predetermined pattern corresponding to at least a predetermined temporal modulation of the electrical current.

~~31.~~16. The method of claim ~~25~~11, wherein the electrodes and the thermal radiation emitting element are included within a housing, and wherein at least part of the housing enables thermal radiation passage therethrough.

~~32. The method of claim 31, further comprising:~~

~~removing heat, generated by the thermal radiation emitting element, by at least one heat sink of the housing.~~

~~33. The method of claim 31, wherein the housing provides a vacuumed environment for the thermal radiation emitting element.~~

~~34. The method of claim 31, wherein the at least part of the housing that enables thermal radiation passage therethrough is made of one or more of the following materials: germanium, Teflon, silicon, zinc selenide or polyethylene.~~

~~35. The method of claim 31, wherein a shape of the thermal radiation emitting element is a flat surface, and wherein the housing comprises a marking instructing a user of a connection direction of connecting the housing to a fuse holder for providing thermal radiation at desired directions.~~

~~36. The method of claim 25, wherein the thermal radiation emitting element has one of the following shapes: a spiral, a cylinder, a fiber or a flat surface.~~

~~37.~~17. The method of claim ~~31~~16, wherein the housing is shaped as a fuse enabling detachably connecting the housing to a fuse holder.

~~38. The method of claim 37, wherein the housing and the fuse holder meet the DIN 72581 standard.~~

~~39. The method of claim 37, wherein the electrical current is provided to the electrodes by the fuse holder.~~

~~40. The method of claim 37, wherein the fuse holder comprises a reflector for directing the thermal radiation towards desired directions.~~

~~41. The method of claim 37, wherein the fuse holder is connected to a reflective surface for reflecting the thermal radiation towards desired directions.~~

~~42. The method of claim 41, wherein upon connecting the housing to the fuse holder, the housing is located within a substrate of the reflective surface, the substrate being designed to reflect the thermal radiation towards the desired directions.~~

~~43. The method of claim 25, wherein the at least one thermal radiation emitting element is a plurality of thermal radiation emitting elements, wherein each thermal radiation emitting element of the plurality of thermal radiation emitting elements emits thermal radiation in a given direction, so that at least one of the thermal radiation emitting elements emits first thermal radiation in a first direction and at least another one of the thermal radiation emitting elements emits second thermal radiation in a second direction, other than the first direction.~~

~~44. The method of claim 30, wherein the pattern is a pre-defined pattern.~~

~~45. The method of claim 25, wherein the thermal signature is generated for marking one or more objects.~~

~~46.~~18. The method of claim ~~30~~15, wherein a thermographic camera is capable of determining a heatmap of an area of interest, and wherein the pattern is generated to match the heatmap.

~~47.~~19. The method of claim ~~46~~18, wherein the pattern is generated in order to camouflage an object located between a viewer and the area of interest.

~~48.~~20. A non-transitory computer readable storage medium having computer readable program code embodied therewith, the computer readable program code, executable by a controller of a computer to perform a thermal signature generating method, the method comprising:

providing electrical current through at least one thermal radiation emitting element, causing the at least one thermal radiation emitting element to emit thermal radiation for generating a thermal signature, wherein each of the at least one thermal radiation emitting elements extends between two spaced-apart opposite solid surfaces defined by two opposite electrodes and comprises an array of Carbon Nanotubes (CNTs), the array being connected by its two opposite ends to said two opposite electrodes, respectively, and extending along a space between the electrodes, the electrodes providing the electrical current through the thermal radiation emitting element.