CLAIMS

1. An antenna arrangement (100, 200, 300, 400, 500) comprising at least a first and a second elongated structure (110, 120; 210, 220, 230, 240; 310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) for guiding an electromagnetic wave, each of said structures comprising a plurality of radiation elements (118, 128; 218, 228, 238,248; 318, 328, 338, 348, 358, 368, 378), wherein said plurality of radiation elements are through-going perforations in said elongated structure, each of said structures exhibiting a longitudinal direction of extension, said structures are positioned alongside each other in their longitudinal direction of extension forming a bundle, characterized in that said structures are arranged within the bundle such that the radial positions of said structures are alternated in the longitudinal direction of extension.

2. The antenna arrangement according to claim 1, wherein the structures (210, 220, 230, 240) form a flat bundle.

3. The antenna arrangement according to claim 2, wherein said elongated structures (210, 220, 230, 240) are plaited, braided, pleated or wounded.

4. The antenna arrangement according to claim 2 or 3, wherein said at least one structure is folded at a first side of the bundle to a second side of the bundle.

5. The antenna arrangement according to claim 1, wherein the structures (110, 120; 310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) form a circular bundle.

6. The antenna arrangement according to claim 5, wherein said structures (110, 120; 310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) are twisted.

7. The antenna arrangement according to claim 5 or 6, wherein the bundle comprises a core (302; 502) and said structures (310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) are twisted around said core.

8. The antenna arrangement according to any of the preceding claims, wherein the structures (110, 120; 210, 220, 230, 240; 310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) are one of the following: a coaxial cable, a waveguide, a strip line arrangement and a micro strip arrangement.

9. The antenna arrangement according to any of the preceding claims, comprising a locking arrangement (410) for locking the structures (310, 320, 330, 340, 350, 360, 370; 510, 520, 530, 540) in a predetermined position relative to each other with respect to their longitudinal extensions and to a distance between the structures.

10. The antenna arrangement according to claim 9, wherein the locking arrangement comprises a sheathing of a non-conducting material at least partly surrounding each of said structures.

11. The antenna arrangement according to claim 9 or 10, wherein the locking arrangement comprises a filling of a non-conducting material at least partly surrounding each of said structures.

12. The antenna arrangement according to any of claims 9 to 11, wherein the locking arrangement comprises one or more of the following: an interacting protrusions in one of the structures and interacting apertures in the other structure, locking bands and hook and loop type fasteners.