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(72) Inventors; and

(71) Applicants: ZANARDO, Andrea [IT/IT]; Via Molino di
Sopra, 6, 31013 Codognè (TV) (IT). ZEN, Andrea [IT/IT];
Via Colombara, 13, 36060 Marostica (VI) (IT).

(74) Agent: PIOVESANA, Paolo et al.; c/o PRAXI Intellec-
tual Property S.p.A. - Venezia, Via F. Baracca, 5/a, 30173
Venezia Mestre (IT).

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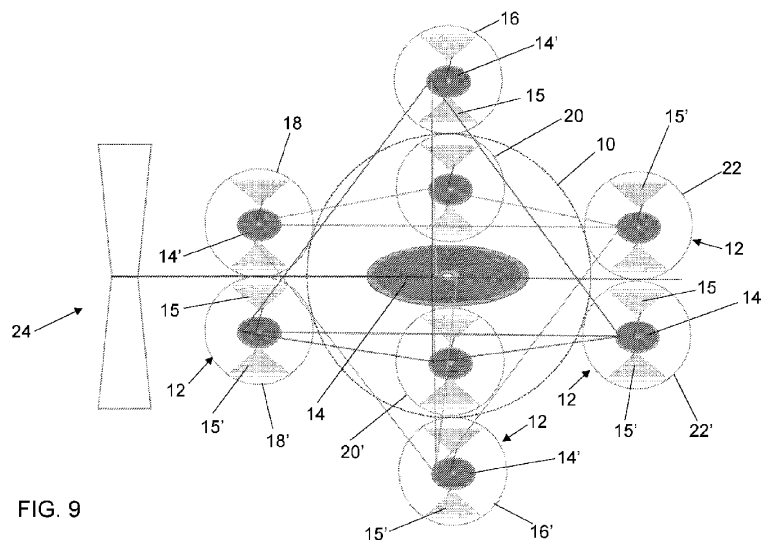


FIG. 9

(57) Abstract: Device for purifying water, of the type comprising a unit configured to receive visible light radiation, in particular solar radiation, and to transform it into electromagnetic energy to be amplified and transformed into ionising energy, with which the water to be purified is treated, characterised in that it comprises: - a central sphere (10) made of material transparent to light radiation, - an equatorial disk (13) of said central sphere (10), made of material transparent to light radiation, and extending beyond the edge of said sphere in an annular equatorial sector, which identifies two hemispheres in said sphere, - two groups of four peripheral spheres (12), of which one sphere (16, 16') is placed on the pole of a hemisphere and the other three spheres (18, 20, 22, 18', 20', 22') are simultaneously tangent to the same hemisphere and to the annular sector of the equatorial disk (13), the polar peripheral sphere (16, 16') of each group and the three non-polar peripheral spheres (18', 20', 22', 18, 20, 22) of the other group being placed at the vertices of an equilateral

[Continued on next page]

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pyramid interpenetrating with the other equilateral pyramid at the equatorial disk (13), - an equatorial disk (13') in each peripheral sphere (12), arranged parallel to the equatorial disk (13) of said central sphere (10) made of material transparent to light radiation, - a transfer duct (24) for the water to be purified configured as a venturi tube (26) with a convergent section followed by a divergent section, - a flat spiral winding (14) of electrically conductive wire placed on the equatorial disk (13) of said central sphere (10) and a flat spiral winding (14') of electrically conductive wire placed on the equatorial disk (13') of each peripheral sphere (12), - a pair of opposing conical spiral windings (15, 15') of electrically conductive wire, having their vertex on the centre of the equatorial disk (13') of each peripheral sphere (12) and their base on the surface of this, one of the two conical windings having double the number of turns compared to the other and opposite winding direction, - a pair of windings (28,28') of conductive wire running along the convergent section and along the divergent section of said transfer duct (24), - a first electrical connection of the internal terminal of the conical spiral windings (15, 15') of each peripheral sphere (12) with the internal terminal of the flat spiral winding (14') of the same peripheral sphere, - a second electrical connection of the external terminal of the flat winding (14') of each polar peripheral sphere (16, 16') with the external terminal of the flat spiral winding (14') of all the other non-polar peripheral spheres (18', 20', 22', 18, 20, 22) belonging to the other group and with the internal terminal of the flat spiral winding (14) of the equatorial disk (13) of the central sphere (10), a third electrical connection of said flat spiral winding (14) of the equatorial disk (13) of the central sphere (10) with the windings (28,28') of said transfer duct (24).