(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 October 2014 (02.10.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/158116 A2

(51) International Patent Classification:
B60Q 1/26 (2006.01)

(21) International Application Number:
PCT/TR2014/000093

(22) International Filing Date:
26 March 2014 (26.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2013/03679 27 March 2013 (27.03.2013) TR

(71) Applicant: **EMS MOBIL SISTEMLER VE HASTANE MALZEMELERI SANAYI VE TICARET ANONIM SIRKETI** [TR/TR]; 1.Organize Sanayi Bölgesi Uygurlar Cad. No:5/A Sincan, Ankara (TR).

(72) Inventor: **MEVLUT, Sahin**; 1.Organize Sanayi Bölgesi Uygurlar Cad. No:5/A Sincan, Ankara (TR).

(74) Agent: **ONAL, Birol**; Rehber Marka Patent Danismanlik Hiz. San. Tic. Ltd. Sti., Mustafa Kemal Mahallesi 2140, Sokak no. 11/16, Sogutozu/Cankaya, Ankara (TR).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) Title: INNOVATION IN SIREN SYSTEMS

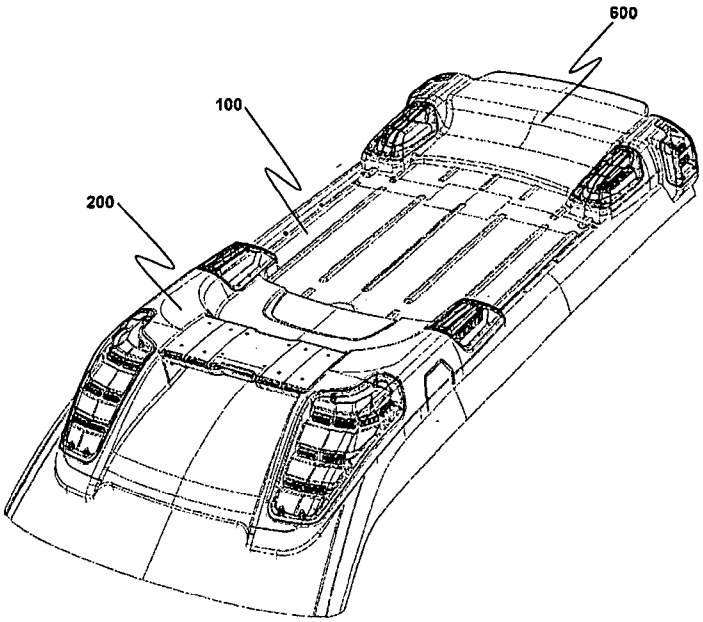

Figure 1

(57) Abstract: The invention is about portable, low cost, energy efficient and easy to install light and audio alarm systems used for the purpose of making way, alarming and deterring of light and audio alarm group motorized vehicles which consists of a variety of units. The invention is about light and audio alarm systems, consisting of front light and audio alarm system and back light alarm system, constituted by design and technical developments especially to eliminate high workforce problems experienced in maintenance, repairing and changing of vehicle top audio and visual alarm signs and to eliminate damages causing distortions on existing ambulances.

WO 2014/158116 A2

DESCRIPTION

INNOVATION IN SIREN SYSTEMS

TECHNICAL FIELD

The invention is about portable, low cost, energy efficient and easy to install audio and light alarm systems used for the purpose of making way, alarming and deterring of light and audio alarm group motorized vehicles which consists of a variety of units.

The invention is about audio and light alarm systems, consisting of front light and audio alarm system and back light alarm system, constituted by design and technical developments especially to eliminate the high workforce problems experienced in installation, maintenance - repairing and replacing the vehicle top audio and visual alarm signs and to eliminate damages causing distortions on existing ambulances.

PREVIOUS TECHNIQUE

Classic systems consist of light and audio alarm system control unit, amplification unit and speaker unit. Functions such as making announcements over the audio alarm system and the light alarm system control are being performed. One of the most important vehicles in which the audio alarm systems are used is ambulances. Ambulances take on the task of carrying injured people to hospitals as soon as possible and performing first responses. For this reason they do not posses high level medical hardware. The systems used for ambulances to get to hospitals are the light and audio alarm systems, these systems being ineffectual cause ambulances to arrive late at hospitals. However, the systems used in the classic structure have the same physical and technical specifications with police vehicles and this causes ambulances which serve to the health business with high costs not to draw enough attention in traffic. This situation has a direct effect on human life.

The light distribution and ineffectualness of the emergency light and audio alarm systems used for classic ambulances to get to hospitals cause ambulances to be unnoticed.

The alarm systems placed on the bodies of classic ambulances are not aerodynamically sufficient. Subsequently for this reason it becomes hard to drive with stability.

16 different units are installed upon the vehicles to consist the classic ambulance light and audio alarm systems. Both high number of installation holes and cable holes are drilled for each one of these separate units. This situation increases labor cost.

Stains form in installation holes drilled while consisting the classic ambulance alarm systems. This situation causes damage to the vehicle surfaces and reduces durability.

Labor is slow and production efficiency is low in the classic ambulance alarm systems because their production technique is not healthy.

The light systems used in the classic ambulance light alarm systems are not designed specifically for ambulances so the LED lights are positioned straight without any angle so subsequently it cannot emit the required light around. As a result of this situation it becomes hard for the ambulance to be noticed.

Electromagnetic problems occur because of the high number of cables used in the classic ambulance alarm systems. The electromagnetic problems occurring according to the signal levels may interfere with the medical devices inside the ambulances and this situation has a direct effect on human life.

As a result, the requirement of a light and audio alarm system providing an economic, useful and energy efficient solution for aforementioned problems present in the current technique and insufficiency of present solutions necessitate a development in the field of the related technique.

PURPOSE OF THE INVENTION

The invention solves all the aforementioned problems altogether. The aforementioned invention is in general a light and audio alarm system designed specifically for ambulances constituted by design and technical development of elements consisting of front light and audio alarm system and rear light alarm system.

Purpose of the invention is to eliminate high workforce problems experienced in maintenance, repairing and changing of vehicle top audio and visual alarm signs and to eliminate damages causing distortions on existing ambulances.

Another purpose of the invention is to make a more efficient and technological design of the light emissions, more effective alarm to every direction and faster clearance of the traffic compared to the past versions of emergency light and audio alarm systems used for ambulances to get to hospitals.

Another purpose of the invention is to provide aerodynamic and generate a stable drive by constituting a body integrated to the surface of the vehicle visually.

Another purpose of the invention is to provide technological and visual differences by constituting an aerodynamic structure cladded to the top and front side which is being read optically for the ambulance to distinguish from vehicles such as a classic police vehicle.

Another purpose of the invention is to decrease the number of holes drilled on the surface of the vehicle by approximately 70%, and eliminating the stain from occurring and damages made to the surface of the vehicle and weakening by decreasing the high number of holes.

One of the purposes of the invention is to speed up the labor, to lower the production costs and at the same time to increase the production output.

Another purpose of the invention is to provide transmittance of a more effective alarm by eliminating blind spots with the optical distribution leds to be placed in front of the power leds and leds in the new light sources to be placed on the light alarm areas with the flexible design to be constituted on the new structure cladded on the surface.

Another purpose of the invention is to decrease cabling and installation labor costs and the negativeness of the situations such as charging other systems formed by the cables, electromagnetic conformity problems, effects of other devices on the cables and charging of the lines by decreasing the number of cables in the system with the connection technique to be used in the design.

Another purpose of the invention is to immediately manufacture and deliver to the consumer in accordance with the demand because of the easiness of manufacturing and installation.

Alternative structures in the below mentioned manners may be presented to achieve aforementioned purposes. The aforementioned elements in the front light and audio alarm system and the rear audio alarm system can be modified geometrically. These alternative structuring does not add innovation to the invention.

In direction of the aforementioned purposes, the invention which eliminates the negativenesses of the present structuring is a audio alarm system including;

at least one front main body connected to the front part of the aforementioned vehicle roof, constituted with an angle towards to the front of the vehicle, at least one front main body front lamp connected to the aforementioned front main body, constituted with an angle towards to the front of the vehicle, at least one front main body rear lamp connected to the aforementioned front main body, at least one mechanism with siren connected to the aforementioned front main body, constituted for audio alarm, at least one rear main body connected to the rear part of the aforementioned vehicle roof, constituted with an angle towards to the sides of the vehicle, at least one rear main body front lamp connected to the aforementioned rear main body, at least one rear main body rear lamp connected to the aforementioned rear main body, constituted with an angle towards to the sides of the vehicle, at least one front main body front lamp housing constituted on the aforementioned front main body for the placement of the aforementioned front main body front lamp, at least one front main body rear lamp housing constituted on the aforementioned front main body for the placement of the aforementioned front main body rear lamp, at least one front main body mechanism with siren constituted on the aforementioned front main body for the placement of the aforementioned mechanism with siren and also at least one aluminum profile, at least one siren short group on which the siren and siren cover are placed and at least one led extension apparatus connected to the aforementioned siren short group constituted for the connection of the system to each other to form a whole in the aforementioned mechanism with siren. at least one siren bottom cover and siren top cover of the aforementioned siren short group, a siren bottom cover installation area on the siren bottom cover placed on the bottom part of the aforementioned siren short group, at least one siren bottom cover connection bulge on the siren bottom cover placed on the bottom part of the aforementioned siren short group constituted for the connection of the aforementioned led extension apparatus to the aforementioned siren short group, at least one siren bottom cover aluminum profile space in which the aforementioned aluminum profile is placed constituted on the floor of the siren bottom cover placed on the bottom part of the aforementioned siren short group, at least one led extension bottom cover and led extension top cover of the aforementioned led extension apparatus, a led extension bottom cover installation area on the led extension bottom cover placed on the bottom part of the aforementioned led extension apparatus, at least one led extension bottom cover connection bulge constituted for the connection of the aforementioned led extension apparatus to the aforementioned siren short group or to another led extension apparatus, on the led extension bottom cover placed on the bottom part of the led extension apparatus, at least one led extension bottom cover aluminum profile space on which the aforementioned aluminum profile is placed constituted on the led extension bottom cover placed on the bottom part of the

aforementioned led extension apparatus, at least one angled front main body front lamp body acting as a structure for the aforementioned front main body front lamp, at least one front main body front lamp cover connected to the aforementioned front main body front lamp body, at least one front main body front lamp lens connected to the aforementioned front main body front lamp body, at least one front main body front lamp body lens housing on which the aforementioned front main body front lamp lenses are placed on the aforementioned front main body front lamp body, at least one front main body front lamp body installation area constituted for the installation of the aforementioned front main body front lamp body to the aforementioned front main body front lamp cover, at least one front main body front lamp cover installation area constituted for the installation of the aforementioned front main body front lamp cover to the aforementioned front main body front lamp body, at least one front main body rear lamp body acting as a structure for the aforementioned front main body rear lamp, at least one front main body rear lamp cover connected to the aforementioned front main body rear lamp body, at least one front main body rear lamp lens connected to the aforementioned front main body rear lamp body, at least one front main body rear lamp lens bottom plate connected to the aforementioned front main body rear lamp body, at least one front main body rear lamp body lens housing on which the aforementioned front main body rear lamp lenses are placed on the aforementioned front main body rear lamp body, at least one front main body rear lamp body installation area constituted for the installation of the aforementioned front main body rear lamp body to the aforementioned front main body rear lamp cover, at least one front main body rear lamp cover installation area constituted for the installation of the aforementioned front main body rear lamp cover to the aforementioned front main body rear lamp body, at least one front main body rear lamp body plate housing on which the aforementioned front main body rear lamp lens bottom plate is placed on the aforementioned front main body rear lamp body, at least one rear main body front lamp housing constituted for the placement of the rear main body front lamp on the aforementioned rear main body, at least one rear main body rear lamp housing constituted for the placement of the rear main body lamp rear front lamp on the aforementioned rear main body, at least one rear main body rear spot housing on which the aforementioned rear main body rear amber is placed on the aforementioned rear main body, at least one rear main body front lamp body acting as a structure for the aforementioned rear main body front lamp, at least one rear main body front lamp cover connected to the aforementioned rear main body front lamp body, at least one rear main body front lamp lens connected to the aforementioned rear main body front lamp body, at least one rear main body rear lamp lens bottom plate connected to the aforementioned rear main body rear lamp body, at least one rear main body front lamp body lens housing on which the aforementioned rear main body front lamp lenses are placed on the aforementioned rear main body front lamp body, at least one rear main body front lamp body

installation area constituted for the installation of the aforementioned rear main body front lamp body to the aforementioned rear main body front lamp cover, at least one rear main body front lamp body plate housing on which the aforementioned rear main body front lamp lens bottom plate is placed on the aforementioned rear main body rear lamp body, at least one rear main body front lamp cover installation area constituted for the installation of the aforementioned rear main body front lamp cover to the aforementioned rear main body front lamp body, at least one angled rear main body rear lamp body acting as a structure for the aforementioned rear main body rear lamp, at least one rear main body rear lamp cover connected to the aforementioned rear main body rear lamp body, at least one rear main body rear lamp lens connected to the aforementioned rear main body rear lamp body, at least one rear main body rear lamp body lens channel on which the aforementioned rear main body rear lamp lenses are placed on the aforementioned rear main body rear lamp body, at least one rear main body rear lamp body installation area constituted for the installation of the aforementioned rear main body rear lamp body to the aforementioned rear main body rear lamp cover, at least one rear main body rear lamp cover installation area constituted for the installation of the aforementioned rear main body rear lamp cover to the aforementioned rear main body rear lamp body, connected on the top of the vehicle used for the purposes of making way, alarming and deterring in the light and audio alarm group motorized vehicles.

All the structural and characteristic specifications and all the advantages of the invention shall be understood more clearly with the figures given below and the detailed explanation written by referencing these figures.

FIGURES TO HELP UNDERSTANDING OF THE INVENTION

Figure-1; The drawing with a perspective view of the light and audio alarm system subject to the invention and the vehicle roof combination.

Figure-2; The drawing with a side view of the light and audio alarm system subject to the invention and the vehicle roof combination.

Figure-3; The drawing with a front view of the light and audio alarm system subject to the invention and the vehicle roof combination.

Figure-4; The drawing with a perspective view of the unassembled front light system in the light and audio alarm system subject to the invention.

Figure-5; The drawing with a perspective view of the assembled rear light system in the light and audio alarm system subject to the invention.

Figure-6; The drawing with a detailed perspective view of the assembled rear light system in the light and audio alarm system subject to the invention.

Figure-7; The drawing with a perspective view of the unassembled rear light system in the light and audio alarm system subject to the invention.

Figure-8; The drawing with a rear view of the light and audio alarm system subject to the invention and the vehicle roof combination.

Figure-9; The drawing with a view of the unassembled rear light system in the light and audio alarm system subject to the invention without the rear main body.

Figure-10; The drawing with a view of the unassembled front light system in the light and audio alarm system subject to the invention without the front main body.

Figure-11; The drawing with a perspective view of the front main body in the front alarm system in the siren system subject to the invention.

Figure-12; The drawing with a rear perspective view of the rear main body in the rear alarm system of the light and audio alarm system subject to the invention.

Figure-13; The drawing with a front perspective view of the rear main body in the rear light system of the light and audio alarm system subject to the invention.

Figure-14; The drawing with a perspective view of the front main body front lamp in the light and audio alarm system subject to the invention.

Figure-15; The drawing with a perspective view of the rear main body front lamp in the light and audio alarm system subject to the invention.

Figure-16; The drawing with a perspective view of the assembled mechanism with siren in the light and audio alarm system subject to the invention.

Figure-17; The drawing with a perspective view of the unassembled mechanism with siren in the light and audio alarm system subject to the invention.

Figure-18; The drawing with a view of the siren short group with the siren cover present used in the mechanism with siren in the light and audio alarm system subject to the invention.

Figure-19; The drawing with a view of the siren short group without the siren cover present used in the mechanism with siren in the light and audio alarm system subject to the invention.

Figure-20; The drawing with a perspective view of one of the led extension apparatus used in the mechanism with siren in the light and audio alarm system subject to the invention.

REFERENCE NUMBERS

100. Vehicle Roof
200. Front Main Body
210. Front Main Body Front Lamp Housing
220. Front Main Body Rear Lamp Housing
230. Front Main Body Mechanism with Siren Housing
300. Mechanism with Siren
310. Aluminum Profile
320. Siren Short Group
321. Siren Bottom Cover
321.1. Siren Bottom Cover Installation Area
321.2. Siren Bottom Cover Connection Bulge
321.3. Siren Bottom Cover Aluminum Profile Space
322. Siren Top Cover
330. Siren Cover
340. Siren
350. Led Extension Apparatus
351. Led Extension Bottom Cover
351.1. Led Extension Bottom Cover Installation Area
351.2. Led Extension Bottom Cover Connection Bulge
351.3. Led Extension Bottom Cover Aluminum Profile Space
352. Led Extension Top Cover
400. Front Main Body Front Lamp
410. Front Main Body Front Lamp Body
411. Front Main Body Front Lamp Body Installation Area
412. Front Main Body Front Lamp Body Lens Channels
420. Front Main Body Front Lamp Cover
421. Front Main Body Front Lamp Cover Installation Area
430. Front Main Body Front Lamp Lens Channel
440. Front Main Body Front Lamp Lens
441. Front Main Body Front Lamp Lens Body
442. Front Main Body Front Lamp Lens Bottom Flange
500. Front Main Body Rear Lamp
510. Front Main Body Rear Lamp Body
511. Front Main Body Rear Lamp Body Installation Area
512. Front Main Body Rear Lamp Body Lens Channels
513. Front Main Body Rear Lamp Body Plate Housin
520. Front Main Body Rear Lamp Cover
521. Front Main Body Rear Lamp Cover Installation Area
530. Front Main Body Rear Lamp Lens Channel
540. Front Main Body Rear Lamp Lens
541. Front Main Body Rear Lamp Lens Body
542. Front Main Body Rear Lamp Lens Bottom Flange
550. Front Main Body Rear Lamp Lens Bottom Plate
600. Rear Main Body
610. Rear Main Body Front Lamp Housing
611. Rear Main Body Front Lamp Installation Area
620. Rear Main Body Rear Lamp Housing
630. Rear Main Body Rear Spot Housing
700. Rear Main Body Front Lamp
710. Rear Main Body Front Lamp Body
711. Rear Main Body Front Lamp Body Installation Area
712. Rear Main Body Front Lamp Body Lens Channels
713. Rear Main Body Front Lamp Body Plate Housing
720. Rear Main Body Front Lamp Cover
721. Rear Main Body Front Lamp Cover Installation Area
730. Rear Main Body Front Lamp Lens Channel
740. Rear Main Body Front Lamp Lens
741. Rear Main Body Front Lamp Lens Body
742. Rear Main Body Front Lamp Lens Bottom Flange
750. Rear Main Body Front Lamp Lens Bottom Plate
800. Rear Main Body Rear Lamp
810. Rear Main Body Rear Lamp Body
811. Rear Main Body Rear Lamp Body Installation Area
812. Rear Main Body Rear Lamp Body Lens Channels
820. Rear Main Body Rear Lamp Cover
821. Rear Main Body Rear Lamp Cover Installation Area
830. Rear Main Body Rear Lamp Lens Channel
840. Rear Main Body Rear Lamp Lens
841. Rear Main Body Rear Lamp Lens Body
842. Rear Main Body Rear Lamp Lens Bottom Flange
900. Rear Main Body Rear Spot
1000. Rear Main Body Rear Amber

DETAILED EXPLANATION OF THE INVENTION

Here, aforementioned siren system includes; front main body (200), front main body front lamp housing (210), front main body rear lamp housing (220), front main body mechanism with siren housing (230), mechanism with siren (300), aluminum profile (310), siren short group (320), siren bottom cover (321), siren bottom cover installation area (321.1), siren bottom cover connection bulge (321.2), siren bottom cover aluminum profile space (321.3), siren top cover (322), siren cover (330), siren (340), led extension apparatus (350), led extension bottom cover (351), led extension bottom cover installation area (351.1), led extension bottom cover connection bulge (351.2), led extension bottom cover aluminum profile space (351.3), led extension top cover (352), front main body front lamp (400), front main body front lamp body (410), front main body front lamp body installation area (411), front main body front lamp body lens channels (412), front main body front lamp lens channel (441), front main body front lamp lens bottom flange (442), front main body rear lamp (500), front main body rear lamp body (510), front main body rear lamp body installation area (511), front main body rear lamp body lens channels (512), front main body rear lamp body plate housing (513), front main body rear lamp cover (520), front main body rear lamp cover installation area (521), front main body rear lamp lens channel (530), front main body rear lamp lens (540), front main body rear lamp lens body (541), front main body rear lamp lens bottom flange (542), front main body rear lamp lens bottom plate (550), rear main body (600), rear main body front lamp housing (610), rear main body front lamp installation area (611), rear main body rear lamp housing (620), rear main body rear spot housing (630), rear main body front lamp (700), rear main body front lamp body (710), rear main body front lamp body installation area (711), rear main body front lamp body lens channels (712), rear main body front lamp body plate housing (713), rear main body front lamp cover (720), rear main body front lamp cover installation area (721), rear main body front lamp lens channel (730), rear main body front lamp lens bottom flange (740), rear main body front lamp lens body (741), rear main body front lamp lens bottom flange (742), rear main body front lamp lens bottom plate (750), rear main body rear lamp (800), rear main body rear lamp body (810), rear main body rear lamp body installation area (811), rear main body rear lamp body lens channels (812), rear main body rear lamp cover (820), rear main body rear lamp cover installation area (821), rear main body rear lamp lens channel (830), rear main body rear lamp lens (840), rear main body rear lamp lens body (841), rear main body rear lamp lens bottom flange (842), rear main body rear spot (900) and rear main body rear amber (1000) elements.

The drawings showing the siren system and the vehicle roof (100) combination subject to the invention are provided in Figure-1, Figure-2 and Figure-3 with perspective, side and front views. In Figure-4 a perspective view of the unassembled front siren system of the siren system subject to the

invention is provided. The front main body (200) given in Figure-11 is installed on the vehicle roof (100) front part. The front main body front lamp housing (210), the front main body rear lamp housing (220) and the front main body mechanism with siren housing (230) are constituted on the front main body (200). The front main body front lamp (400) is connected to the front main body front lamp housing (210). A drawing with a view of the unassembled front siren system on the siren system subject to the invention without the front main body (200) is provided in Figure-10. The front main body front lamp (400) provided in Figure-14 is constituted as the main element from; the front main body front lamp body (410), the front main body front lamp cover (420), the front main body front lamp lens channel (430) and the front main body front lamp lenses (440). The front main body front lamp lens channels (412) are located at the front main body front lamp body (410). The front main body front lamp lens channel (430) is located at the aforementioned front main body front lamp lens channels (412). The front main body front lamp lens (440) is connected to the front main body front lamp lens channel (430). The front main body front lamp lens (440) is constituted from; the front main body front lamp lens body (441) and the front main body front lens bottom flange (442) elements. The front main body front lamp cover (420) is attached to the front main body front lamp body (410) by the front main body front lamp body installation area (411) and the front main body front lamp cover installation area (421).

The front main body rear lamp (500) is connected to the front main body rear lamp housing (220). The front main body rear lamp (500) provided in Figure - 15 is constituted as the main element from; the front main body rear lamp body (510), the front main body rear lamp cover (520), the front main body rear lamp lens channel (530) and the front main body rear lamp lenses (540). The front main body rear lamp lens channels (512) are located at the front main body rear lamp body (510). The front main body rear lamp lens channel (530) is located at the aforementioned front main body rear lamp lens channels (512). The front main body rear lamp lens (540) is connected to the front main body rear lamp lens channel (530). The front main body rear lamp lens (540) is constituted from; the front main body rear lamp lens body (541) and the front main body rear lens bottom flange (542) elements. The front main body rear lamp cover (520) is attached to the front main body rear lamp body (510) by the front main body rear lamp body installation area (511) and the front main body rear lamp cover installation area (521).

Another element connected to the front main body (200) is the mechanism with siren (300) provided in Figure-16 which is placed on the front main body mechanism with siren (230). The aforementioned mechanism with siren (300) showed as unassembled in Figure-17 is constituted from; the aluminum profile (310), the siren short group (320), the siren cover (330), the siren (340) and the led extension

apparatus (350) elements. The siren short group (320) showed in Figure-18 and Figure-19 includes; the siren bottom cover (321) and the siren top cover (322). The siren bottom cover (321) includes the siren bottom cover installation area (321.1). The siren bottom cover (321) is installed to the siren top cover (322) by the aforementioned siren bottom cover installation area (321.1). The siren bottom cover aluminum profile space (321.3) on the bottom part and the siren bottom cover connection bulge (321.2) on the side part of the siren bottom cover (321) are constituted. The siren bottom cover aluminum profile space (321.3) is constituted for the placement of the aluminum profile (310) and the siren bottom cover connection bulge (321.2) on the side part is constituted for the siren short group (320) to pass on to the led extension apparatus (350). The siren (340) and the siren cover (330) are connected on the siren short group (320) in the mechanism with siren (300).

The led extension apparatus (350) is placed in the siren short group (320) part of the mechanism with siren (300). The led extension apparatus (350) provided in Figure - 20 includes; the led extension cover (351) and the led extension top cover (352). The led extension bottom cover (351) includes the led extension bottom cover installation area (351.1). The led extension bottom cover (351) is installed to the led extension top cover (352) by the aforementioned led extension bottom cover installation area (351.1). The led extension bottom cover aluminum profile space (351.3) on the bottom part and the led extension bottom cover connection bulge (351.2) on the side part of the led extension bottom cover (351) are constituted. The led extension bottom cover aluminum profile space (351.3) is constituted for the placement of the aluminum profile (310) and the led extension bottom cover connection bulge (351.2) on the side part is constituted for the led extension apparatus (350) to pass on to another led extension apparatus (350) or to the siren short group (320).

In Figure-5 and Figure-6 a perspective view showing details of the assembled rear siren system of the siren system subject to the invention is provided. In Figure-7 a perspective view of the unassembled rear siren system of the siren system subject to the invention is provided. Another body installed to the rear part of the vehicle roof (100) is the rear main body (600) which is shown in Figure-12 and Figure-13. The rear main body front lamp housing (610), the rear main body rear lamp housing (620) and the rear main body rear spot housing (630) are constituted on the rear main body (600). The rear main body front lamp (700) is connected to the rear main body front lamp housing (610). A drawing with a view of the unassembled rear siren system on the siren system subject to the invention without the rear main body (600) is provided in Figure-9. The rear main body front lamp (700) is constituted as the main element from; the rear main body front lamp body (710), the rear main body front lamp cover (720), the rear main body front lamp lens channel (730) and the rear main body front lamp lenses (740). The rear main body front lamp lens channels (712) and the rear main body

front lamp body plate housing (713) are present on the rear main body front lamp body (710). The rear main body front lamp lens channel (730) is located at the aforementioned rear main body front lamp lens channels (712). The rear main body front lamp lens bottom plate (750) is located at the aforementioned rear main body front lamp body plate housing (713). The rear main body front lamp lens (740) is connected to the rear main body front lamp lens channel (730). The rear main body front lamp lens (740) is constituted from; the rear main body front lamp lens body (741) and the rear main body front lens bottom flange (742) elements. The rear main body front lamp cover (720) is attached to the rear main body front lamp body (710) by the rear main body front lamp body installation area (711) and the rear main body front lamp cover installation area (721).

The rear main body rear lamp (800) is connected to the rear main body rear lamp housing (620). The rear main body rear lamp (800) is constituted as the main element from; the rear main body rear lamp body (810), the rear main body rear lamp cover (820), the rear main body rear lamp lens channel (830) and the rear main body rear lamp lenses (840). The rear main body rear lamp lens channels (812) are located at the rear main body rear lamp body (810). The rear main body rear lamp lens channel (830) is located at the aforementioned rear main body rear lamp lens channels (812). The rear main body rear lamp lens (840) is connected to the rear main body rear lamp lens channel (830). The rear main body rear lamp lens (840) is constituted from; the rear main body rear lamp lens body (841) and the rear main body rear lamp lens bottom flange (842) elements. The rear main body rear lamp cover (820) is attached to the rear main body rear lamp body (810) by the rear main body rear lamp body installation area (811) and the rear main body rear lamp cover installation area (821).

Finally the rear main body rear spot (900) and the rear main body rear amber (1000) are connected to the rear main body rear spot housing (630) as shown in Figure-8. With it the installation of all the siren system to the vehicle roof (100) top part is completed.

The scope of the protection of this application is determined in the volition part and it is clear that a specialist, who cannot be limited to the things told absolutely for sampling purposes above, can present the innovation presented by the invention, using similar structurings and/or can apply this structuring to other fields with similar purposes used at the related technique. Subsequently it is obvious that these kinds of structurings would lack the criteria to overcome the known situation of the innovation and especially the technique.

CLAIMS

1) The invention is a light and audio alarm system connected on the vehicle roof (100) used for the purposes of making way, alarming and deterring in the light and audio alarm group motorized vehicles, its specifications are;
   - at least one front main body (200) connected to the front part of the aforementioned vehicle roof (100), constituted with an angle towards to the front of the vehicle,
   - at least one front main body front lamp (400) connected to the aforementioned front main body (200), constituted with an angle towards to the front of the vehicle,
   - at least one front main body rear lamp (500) connected to the aforementioned front main body (200),
   - at least one mechanism with siren (300) connected to the aforementioned front main body (200), constituted for audio alarm,
   - at least one rear main body (600) connected to the rear part of the aforementioned vehicle roof (100), constituted with an angle towards to the sides of the vehicle,
   - at least one rear main body front lamp (700) connected to the aforementioned rear main body (600),
   - at least one rear main body rear lamp (800) connected to the aforementioned rear main body (600), constituted with an angle towards to the sides of the vehicle,

   being characterized by including the above elements.

2) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body front lamp housing (210) constituted for the placement of the aforementioned front main body front lamp (400) on to the aforementioned front main body (200).

3) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp housing (220) constituted for the placement of the aforementioned front main body rear lamp (500) on to the aforementioned front main body (200).

4) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body mechanism with siren housing (230) constituted for the placement of the aforementioned mechanism with siren (300) on to the aforementioned front main body (200).

5) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one aluminum profile (310) constituted on the aforementioned mechanism with siren (300) for the connection of the system to each other and to form a whole, at least one siren short group (320) on which the siren (340) and the siren cover (330) are placed and at least one led extension apparatus (350) connected to aforementioned siren short group (320).

6) It is a light and audio alarm system in conformity with the volition 1 and volition 5 and its specification is; to be characterized by including at least one siren bottom cover (321) and siren top cover (322) of the aforementioned siren short group (320).

7) It is a light and audio alarm system in conformity with the volition 1, volition 5 and volition 6 and its specification is; to be characterized by including the siren bottom cover installation area (321.1) on the siren bottom cover (321) placed on the bottom part of the aforementioned siren short group (320).

8) It is a light and audio alarm system in conformity with the volition 1, volition 5, volition 6 and volition 7 and its specification is; to be characterized by including at least one siren bottom cover connection bulge (321.2) constituted for the connection of the aforementioned led extension apparatus (350) to the aforementioned siren short group (320) on the siren bottom cover (321) placed on the bottom part of the aforementioned siren short group (320).

9) It is a light and audio alarm system in conformity with the volition 1, volition 5, volition 6, volition 7 and volition 8 and its specification is; to be characterized by including at least one siren bottom cover aluminum profile space (321.3) on which the aforementioned aluminum profile is placed constituted on the floor of the siren bottom cover (321) placed on the bottom part of the aforementioned siren short group (320).

10) It is a light and audio alarm system in conformity with the volition 1 and volition 5 and its specification is; to be characterized by including at least one led extension bottom cover (351) and led extension top cover (352) of the aforementioned led extension apparatus (350).

11) It is a light and audio alarm system in conformity with the volition 1, volition 5 and volition 10 and its specification is; to be characterized by including the led extension bottom cover installation area (351.1) on the led extension bottom cover (351) placed on the bottom part of the aforementioned led extension apparatus (350).

12) It is a light and audio alarm system in conformity with the volition 1, volition 5, volition 10 and volition 11 and its specification is; to be characterized by including at least one led extension bottom cover connection bulge (351.2) constituted for the connection of the aforementioned led extension apparatus (350) to the aforementioned siren short group (320) or to another led extension apparatus (350) on the led extension bottom cover (351) placed on the bottom part of the led extension apparatus (320).

13) It is a light and audio alarm system in conformity with the volition 1, volition 5, volition 10, volition 11 and volition 12 and its specification is; to be characterized by including at least one led extension bottom cover aluminum profile space (351.3) on which the aforementioned aluminum profile is placed constituted on the floor of the led extension bottom cover (351) placed on the bottom part of the aforementioned led extension apparatus (350).

14) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one angled front main body front lamp (410) acting as a structure for the aforementioned front main body front lamp (400).

15) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body front lamp cover (420) connected on to the aforementioned front main body front lamp body (410).

16) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body front lamp lens (440) connected on to the aforementioned front main body front lamp body (410).

17) It is a light and audio alarm system in conformity with the volition 1 and volition 16 and its specification is; to be characterized by constituting of the front main body front lamp lens (440) by giving an angle.

18) It is a light and audio alarm system in conformity with the volition 1 and volition 14 and; characterized by including at least one front main body front lamp lens channel (412) on which the aforementioned front main body front lamp lenses (440) are placed on the aforementioned front main body front lamp body (410).

19) It is a light and audio alarm system in conformity with the volition 1, volition 14 and volition 18 and its specification is; to be characterized by including at least one front main body front lamp

body installation area (411) for the installation of the aforementioned front main body front lamp body (410) to the aforementioned front main body front lamp cover (420).

20) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body front lamp cover installation area (421) for the installation of the aforementioned front main body front lamp cover (420) to the aforementioned front main body front lamp body (410).

21) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp body (510) acting as a structure for the aforementioned front main body rear lamp (500).

22) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp cover (520) connected on to the aforementioned front main body rear lamp body (510).

23) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp lens (540) connected on to the aforementioned front main body rear lamp body (510).

24) It is a light and audio alarm system in conformity with the volition 1 and volition 16 and its specification is; to be characterized by constituting of the front main body rear lamp lens (540) by giving an angle.

25) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp lens bottom plate (550) connected on to the aforementioned front main body rear lamp body (510).

26) It is a light and audio alarm system in conformity with the volition 1 and volition 21 and; characterized by including at least one front main body rear lamp lens channel (512) on which the aforementioned front main body rear lamp lenses (540) are placed on the aforementioned front main body rear lamp body (510).

27) It is a light and audio alarm system in conformity with the volition 1, volition 21 and volition 26 and its specification is; to be characterized by including at least one front main body rear lamp body installation area (511) for the installation of the aforementioned front main body rear lamp body (510) to the aforementioned front main body rear lamp cover (520).

28) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one front main body rear lamp cover installation area (521) for the installation of the aforementioned front main body rear lamp cover (520) to the aforementioned front main body rear lamp body (510).

29) It is a light and audio alarm system in conformity with the volition 1 and volition 21 and; characterized by including at least one front main body rear lamp lens housing (513) on which the aforementioned front main body rear lamp lens bottom plate (550) is placed on the aforementioned front main body rear lamp body (510).

30) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body front lamp housing (610) constituted for the placement of the aforementioned rear main body front lamp (700) on to the aforementioned rear main body (600).

31) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear lamp housing (620) constituted for the placement of the aforementioned rear main body rear lamp (800) on to the aforementioned rear main body (600).

32) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear spot housing (630) on which the aforementioned rear main body rear spot (900) and the aforementioned rear main body rear amber (1000) are placed on to the aforementioned rear main body (600).

33) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body front lamp body (710) acting as a structure for the aforementioned rear main body front lamp (700).

34) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body front lamp cover (720) connected on to the aforementioned rear main body front lamp body (710).

35) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body front lamp lens (740) connected on to the aforementioned rear main body front lamp body (710).

36) It is a light and audio alarm system in conformity with the volition 1 and volition 35 and its specification is; to be characterized by constituting of the rear main body front lamp lens (740) by giving an angle.

37) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear lamp lens bottom plate (750) connected on to the aforementioned rear main body rear lamp body (710).

38) It is a light and audio alarm system in conformity with the volition 1 and volition 33 and; characterized by including at least one rear main body front lamp lens channel (712) on which the aforementioned rear main body front lamp lenses (740) are placed on the aforementioned rear main body front lamp body (710).

39) It is a light and audio alarm system in conformity with the volition 1, volition 33 and volition 37 and its specification is; to be characterized by including at least one rear main body front lamp body installation area (711) for the installation of the aforementioned rear main body front lamp body (710) to the aforementioned rear main body front lamp cover (720).

40) It is a light and audio alarm system in conformity with the volition 1 and volition 33 and; characterized by including at least one rear main body front lamp body plate housing (713) on which the aforementioned rear main body front lamp lens bottom plate (750) is placed on the aforementioned rear main body rear lamp body (710).

41) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body front lamp cover installation area (721) for the installation of the aforementioned rear main body front lamp cover (720) to the aforementioned rear main body front lamp body (710).

42) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one angled rear main body rear lamp body (810) acting as a structure for the aforementioned rear main body rear lamp (800).

43) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear lamp cover (820) connected on to the aforementioned rear main body rear lamp body (810).

44) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear lamp lens (840) connected on to the aforementioned rear main body rear lamp body (810).

45) It is a light and audio alarm system in conformity with the volition 1 and volition 42 and its specification is; to be characterized by constituting the rear main body rear lamp lens (840) by giving an angle.

46) It is a light and audio alarm system in conformity with the volition 1 and volition 40 and; characterized by including at least one rear main body rear lamp lens channel (812) on which the aforementioned rear main body rear lamp lenses (840) are placed on the aforementioned rear main body rear lamp body (810).

47) It is a light and audio alarm system in conformity with the volition 1, volition 40 and volition 44 and its specification is; to be characterized by including at least one rear main body rear lamp body installation area (811) for the installation of the aforementioned rear main body rear lamp body (810) to the aforementioned rear main body rear lamp cover (820).

48) It is a light and audio alarm system in conformity with the volition 1 and its specification is; to be characterized by including at least one rear main body rear lamp cover installation area (821) for the installation of the aforementioned rear main body rear lamp cover (820) to the aforementioned rear main body rear lamp body (810).

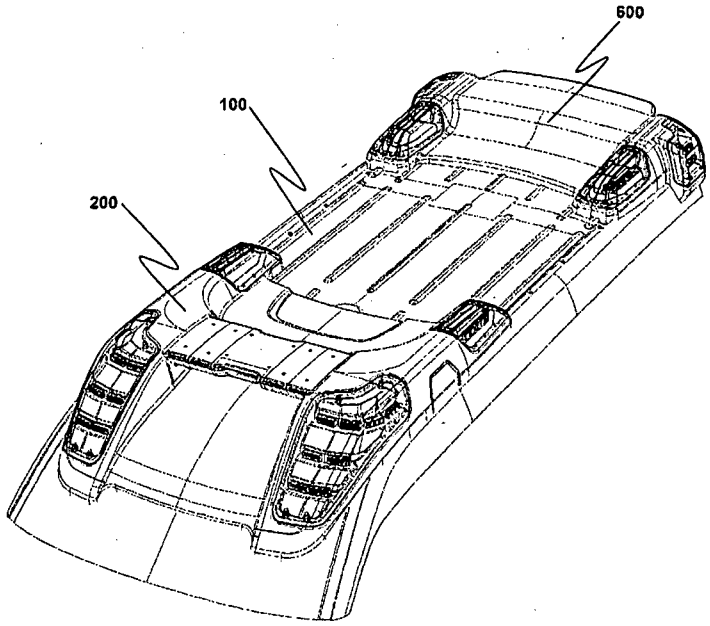

Figure 1

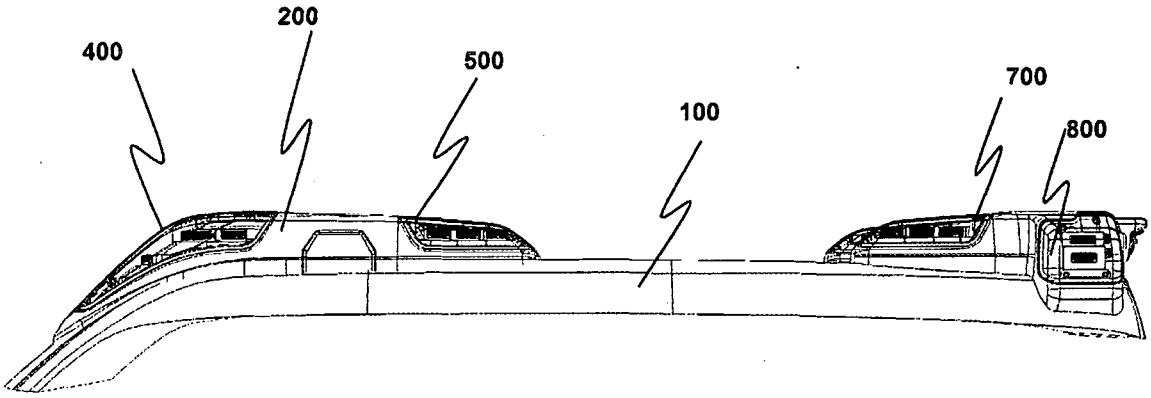

Figure 2

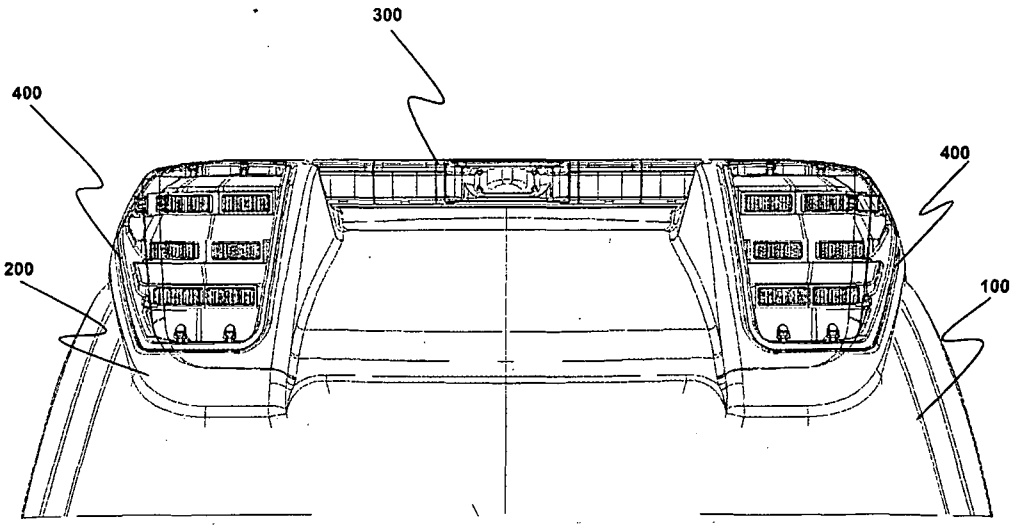

Figure 3

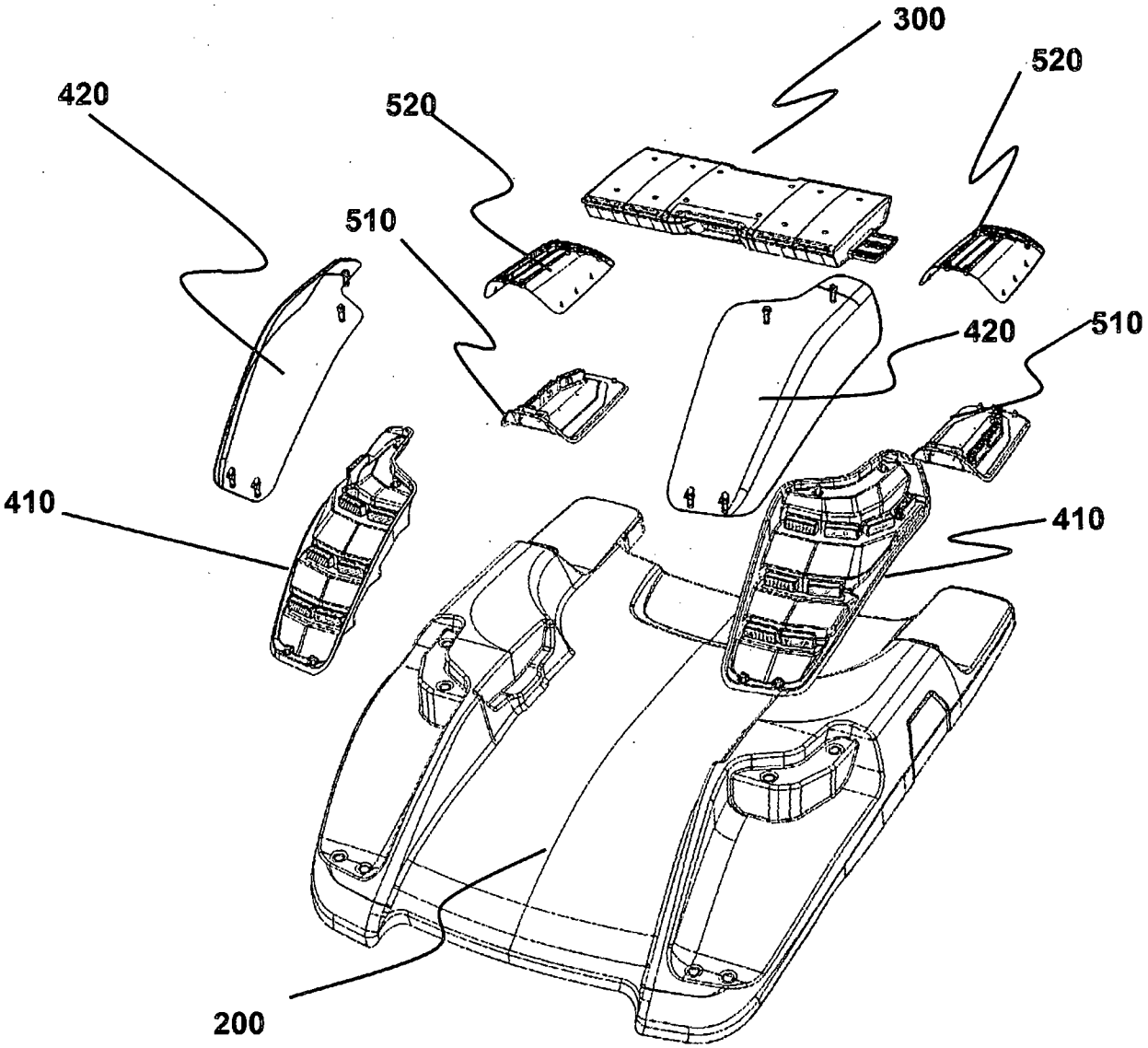

Figure 4

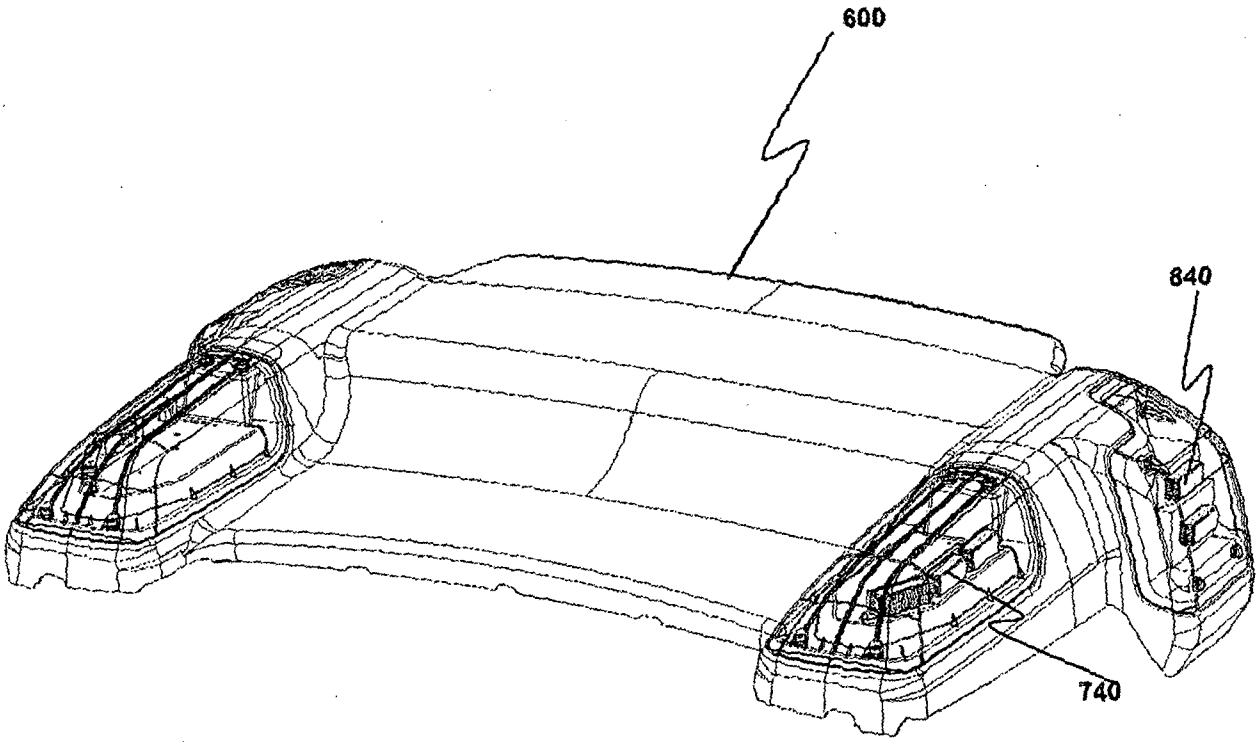

Figure 5

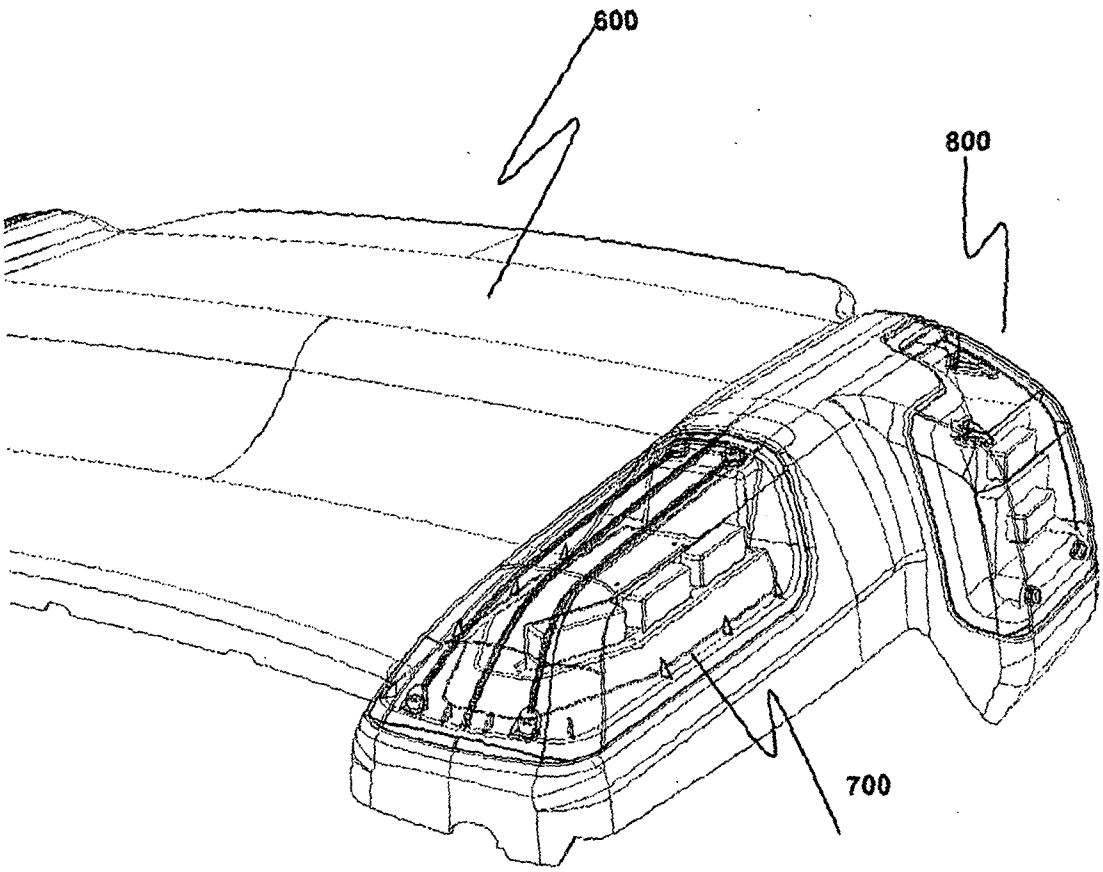

Figure 6

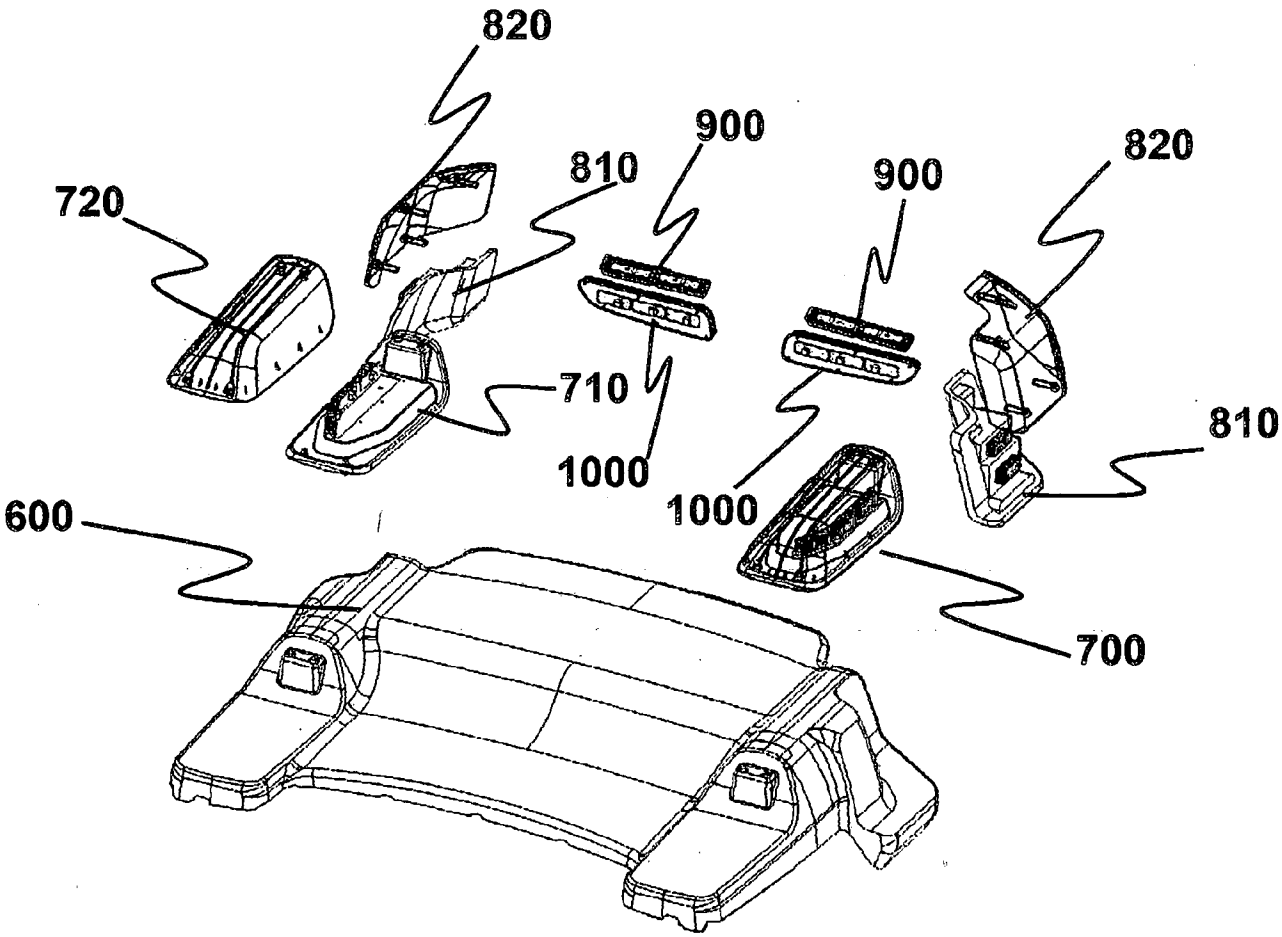

Figure 7

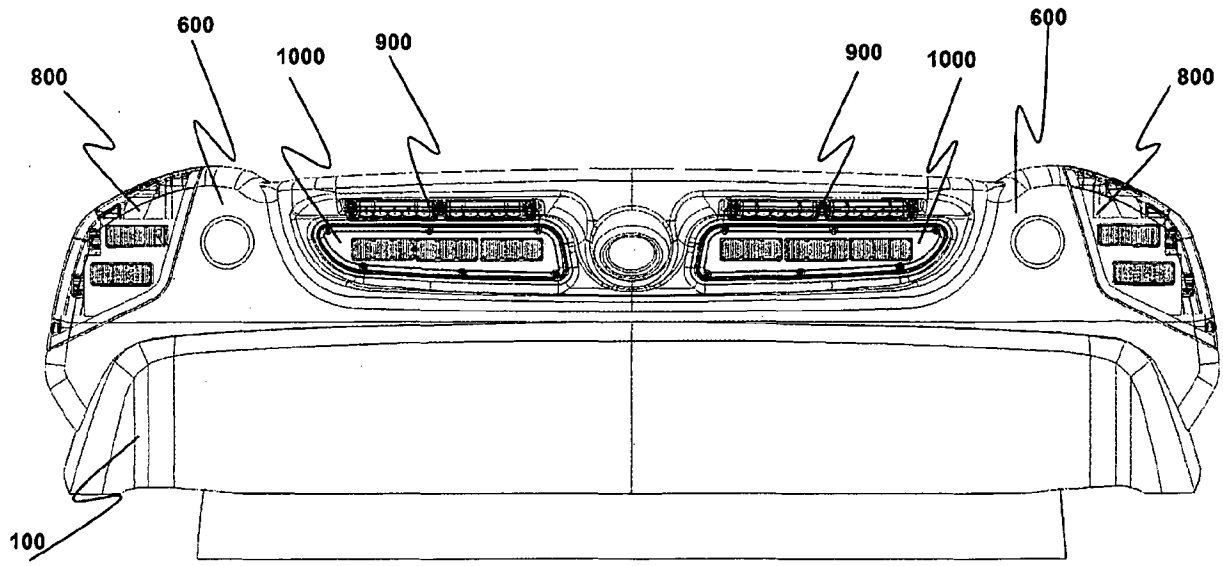

Figure 8

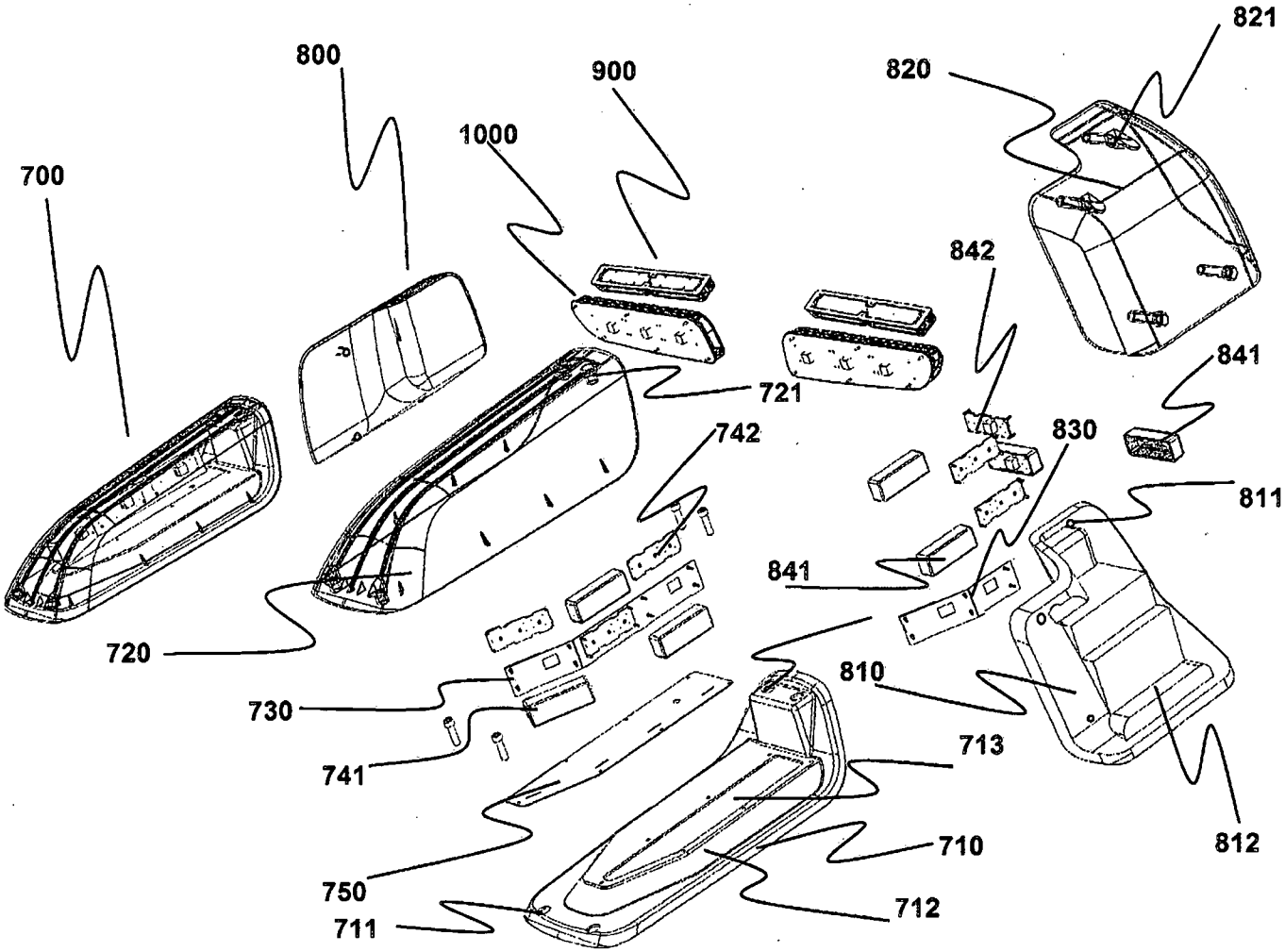
821
800
900
820
1000
700
842
841
721
742
830
811
841
720
730
810
741
713
750
710
812
712
711

Figure 9

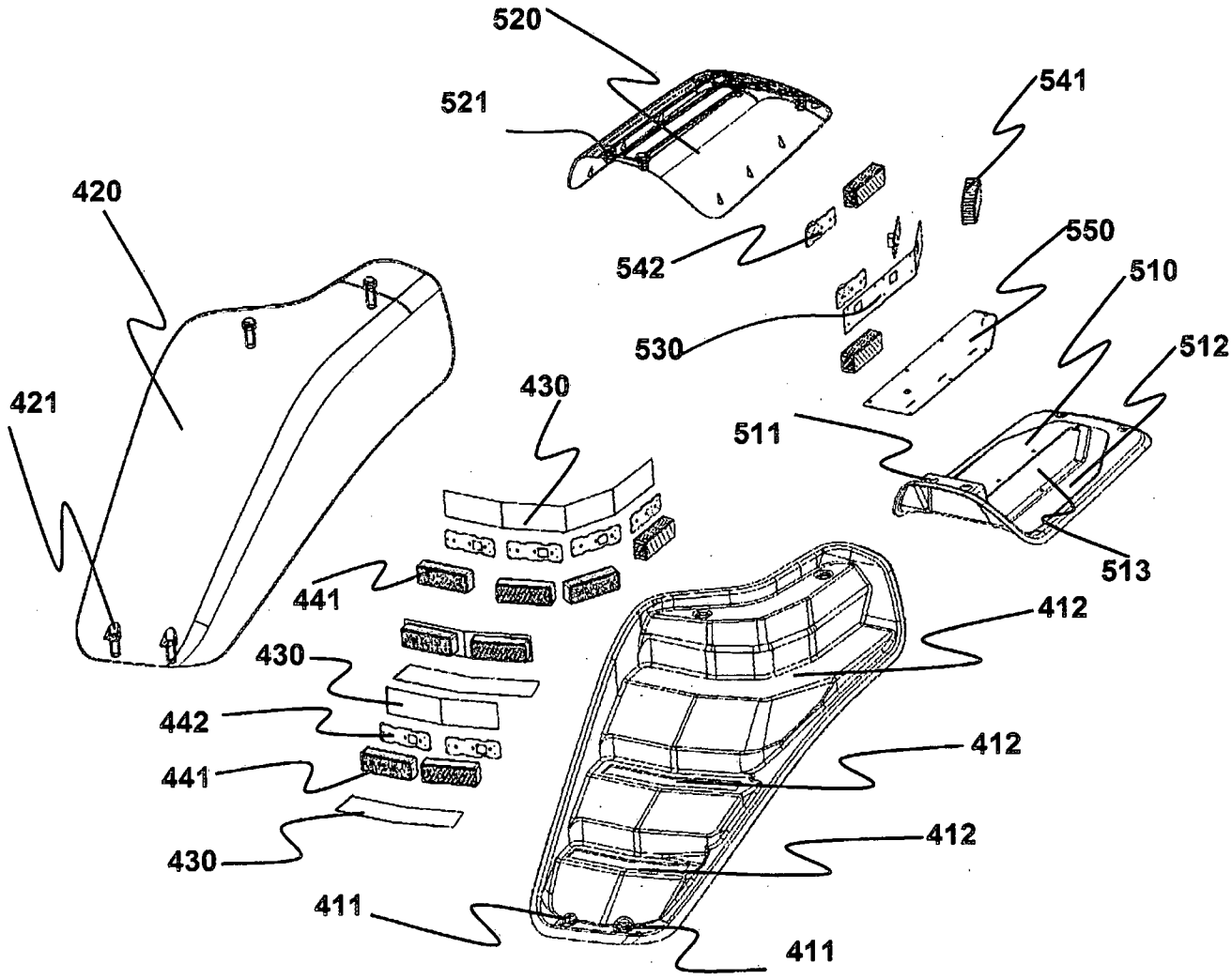
520
521
541
420
542
550
510
530
512
421
430
511
441
513
412
430
442
412
441
412
430
411
411

Figure 10

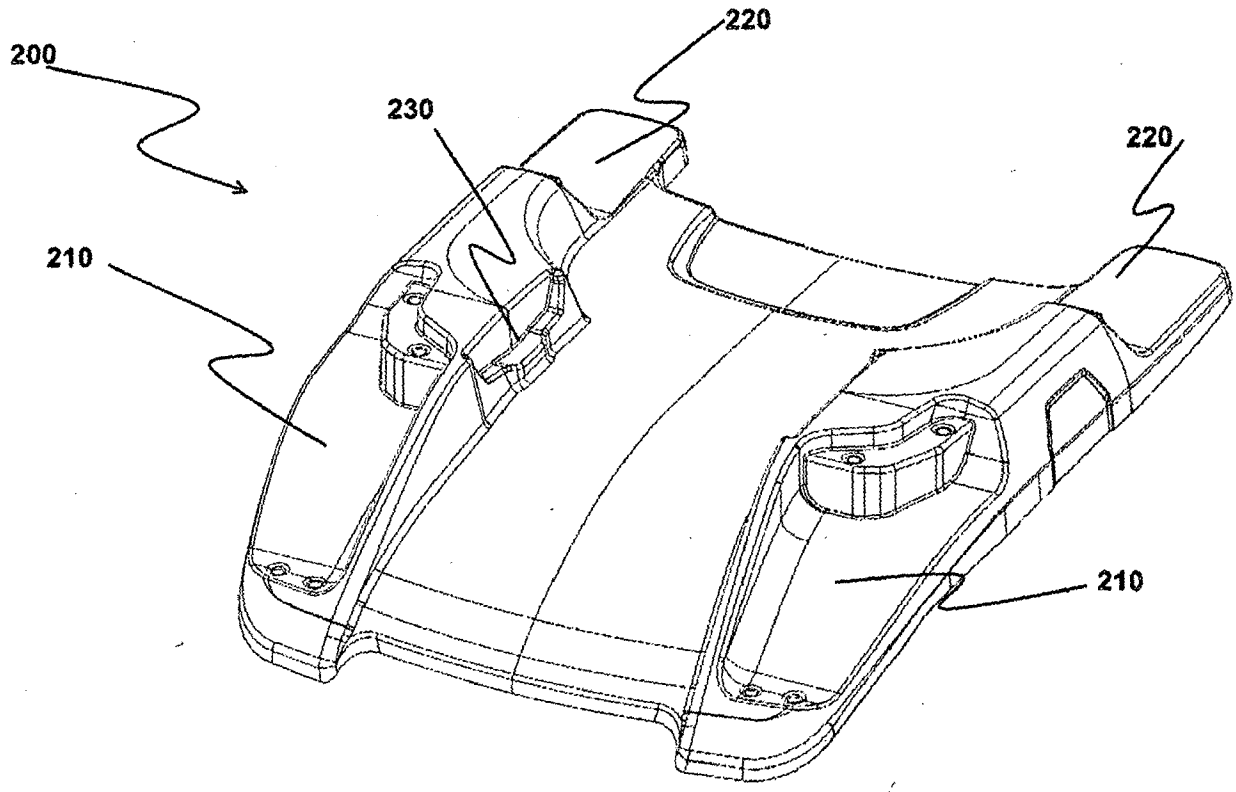

Figure 11

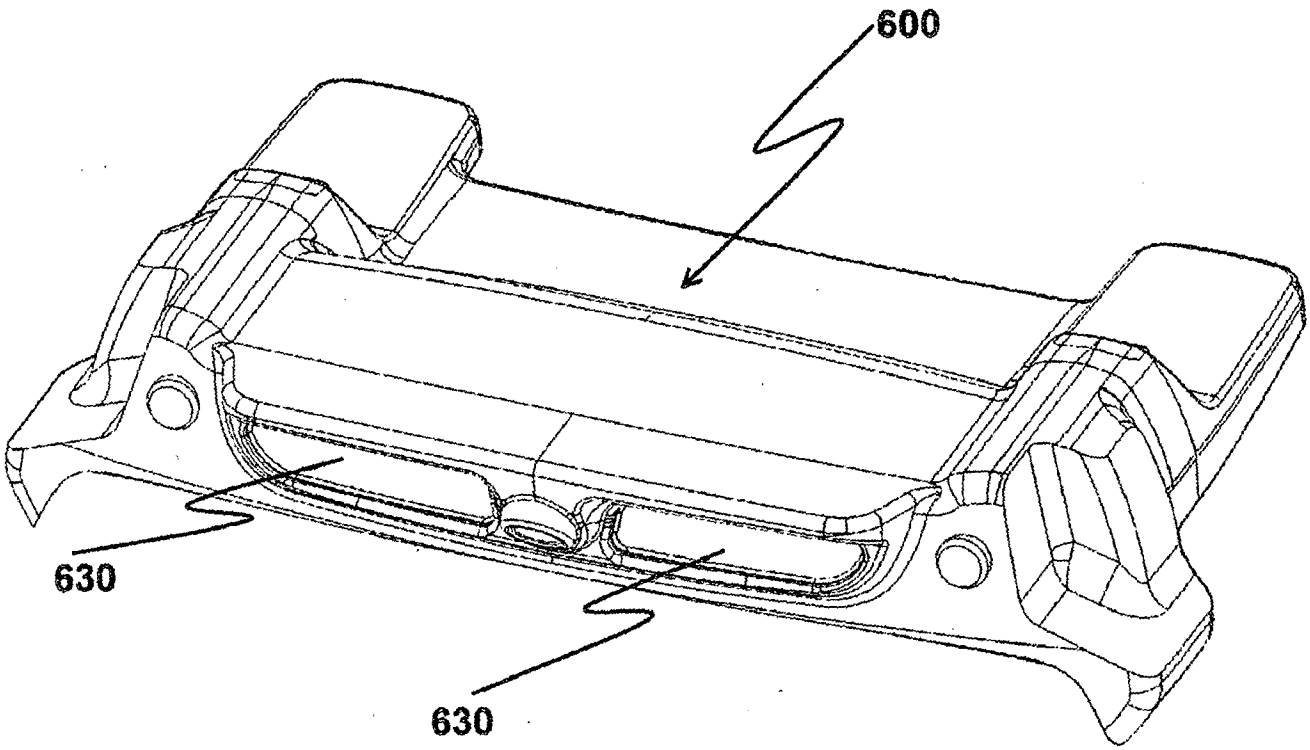

Figure 12

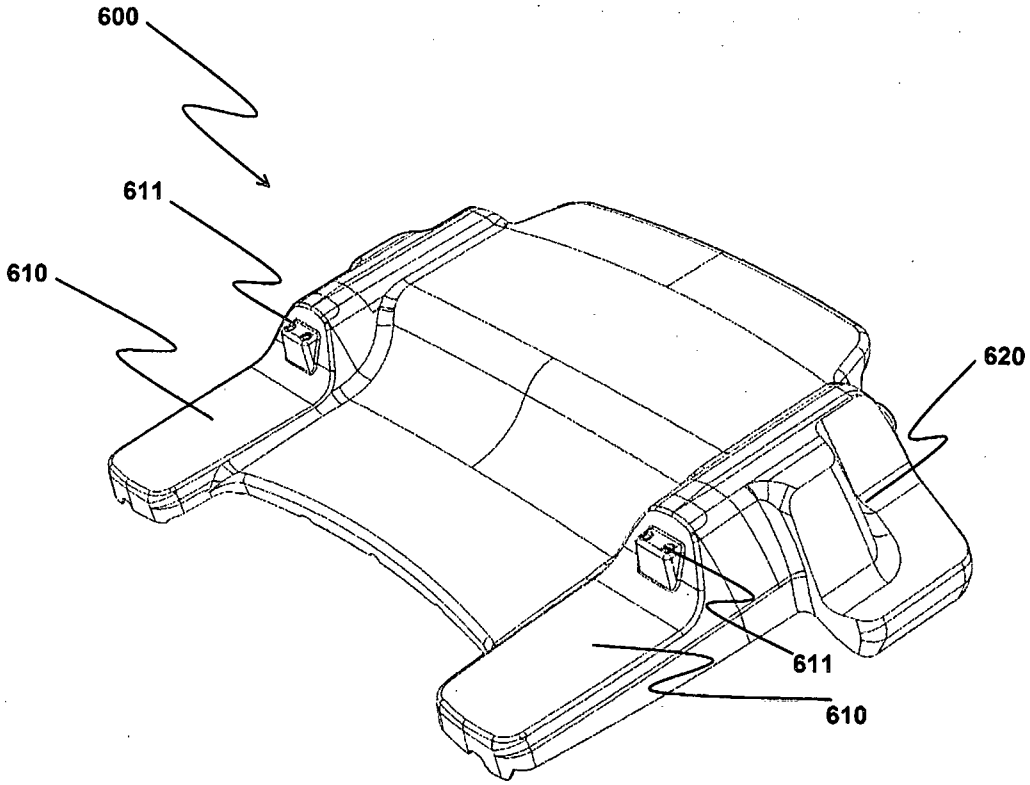

Figure 13

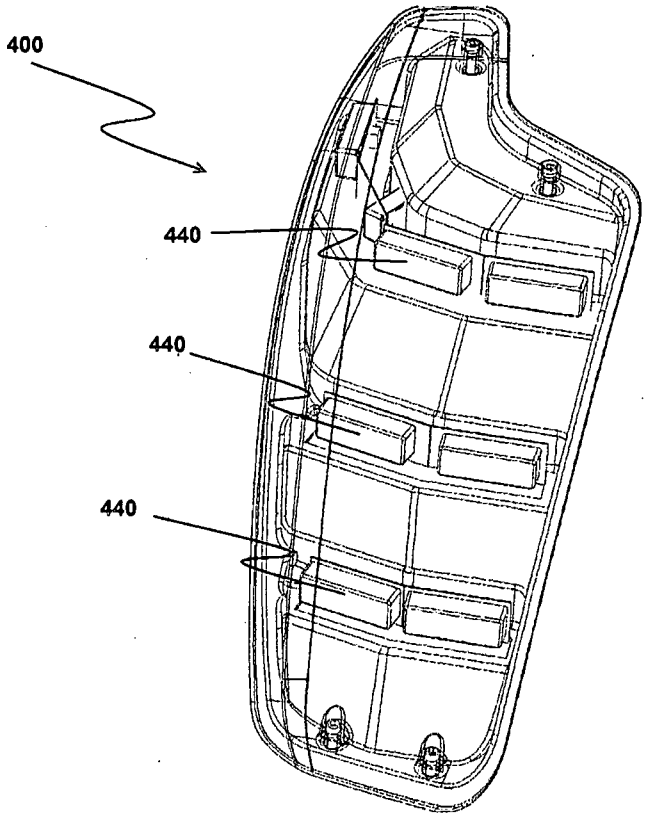

Figure 14

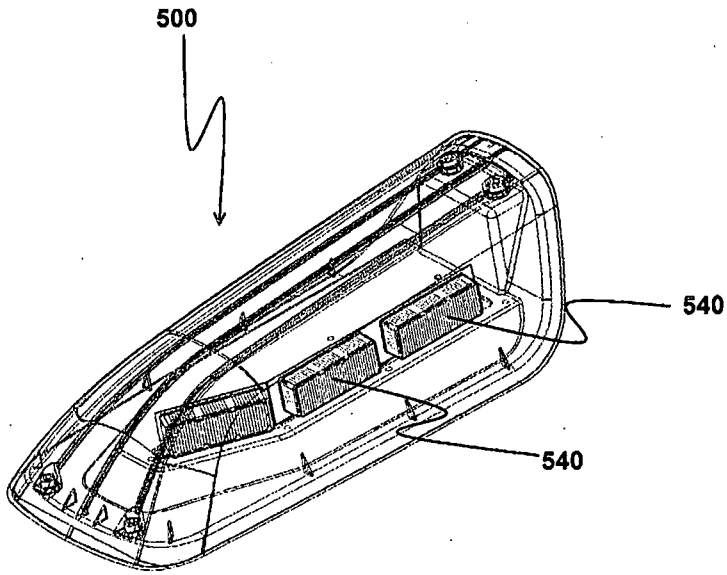

Figure 15

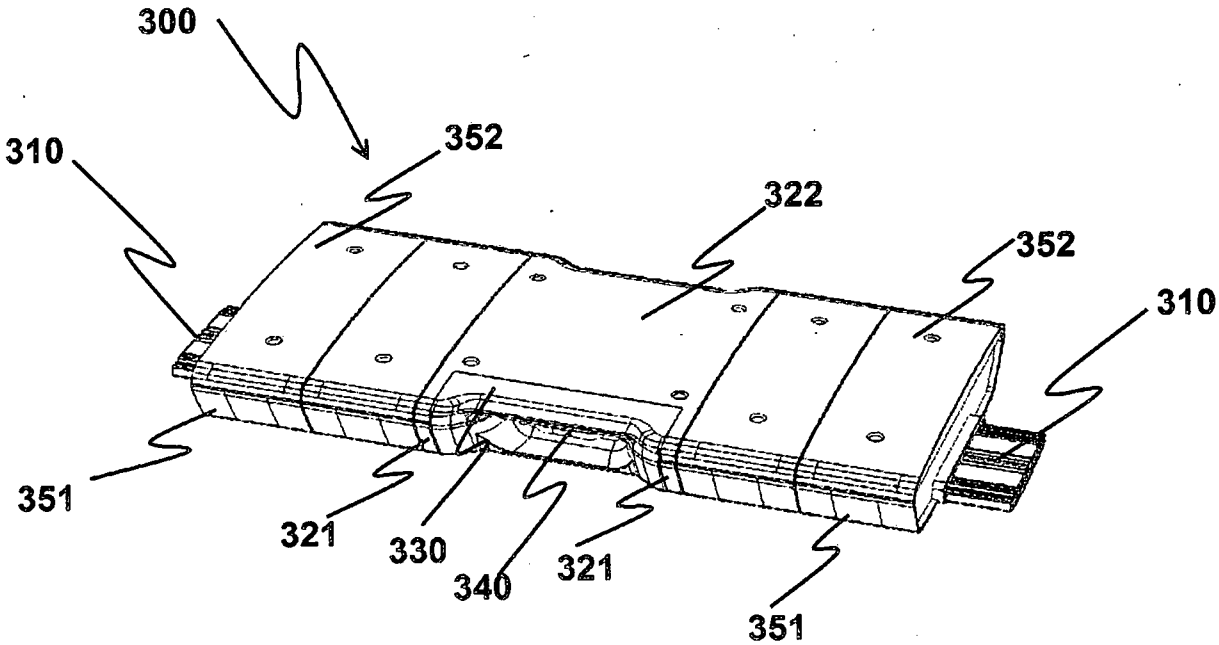

Figure 16

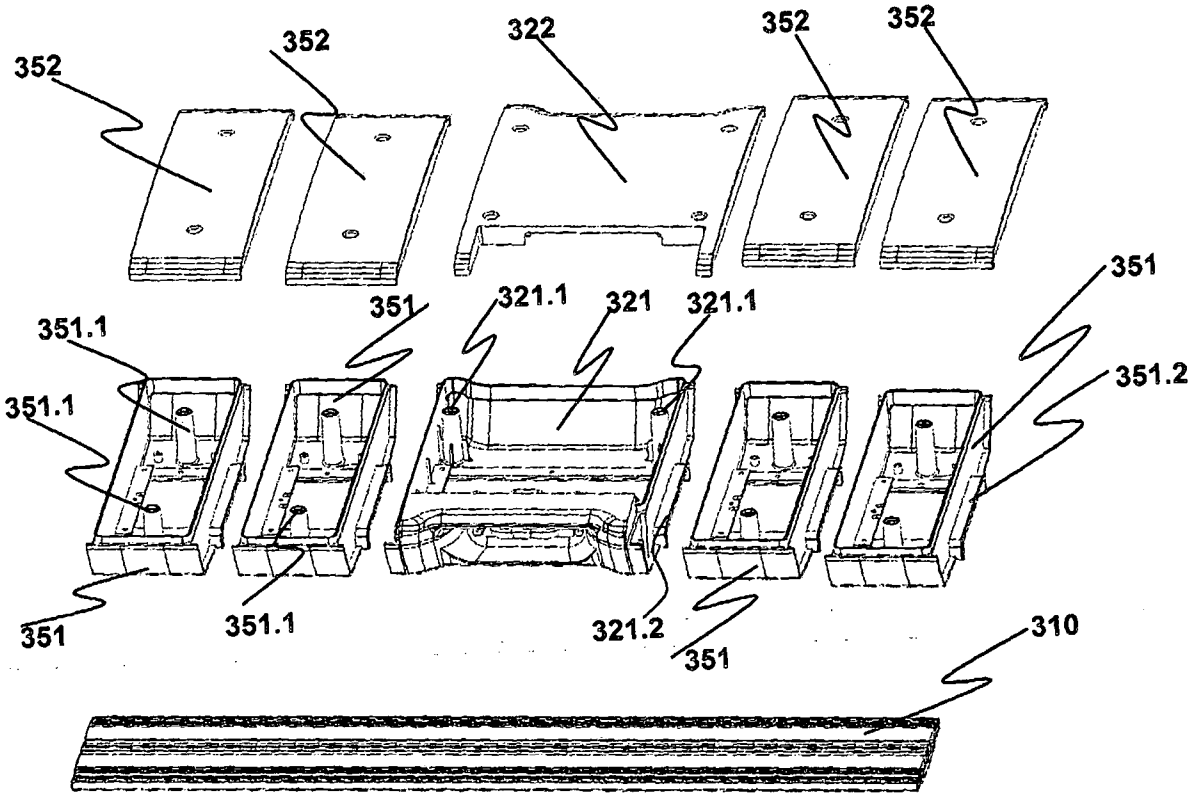
352
352
322
352
352
351
351.1
351
321.1
321
321.1
351.2
351.1
351
351.1
321.2
351
310

Figure 17

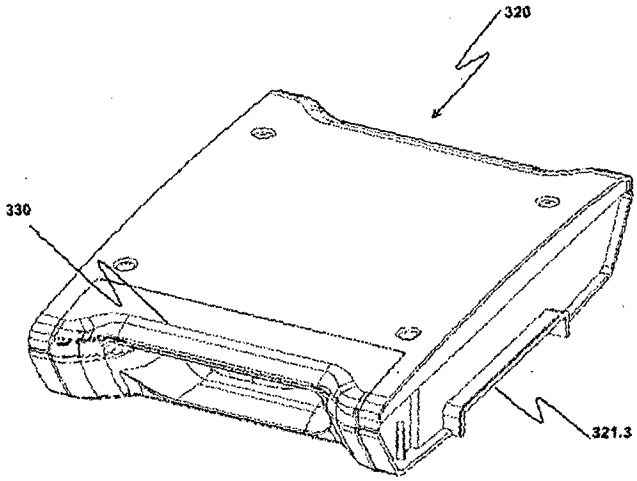

Figure 18

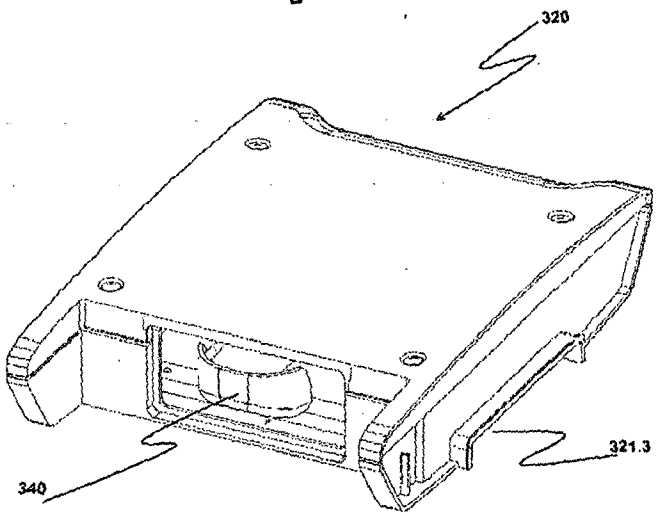

Figure 19

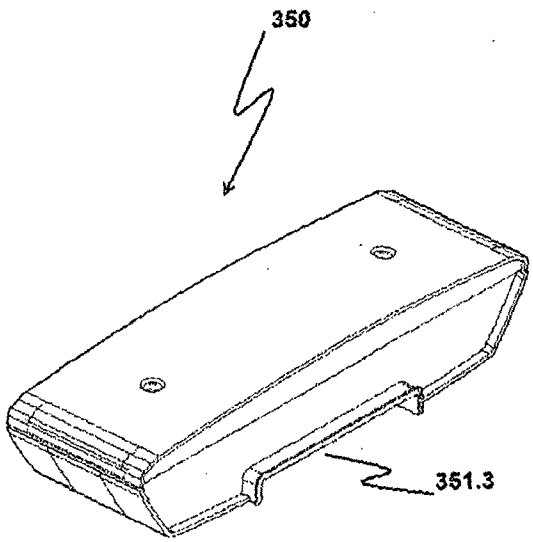

Figure 20