

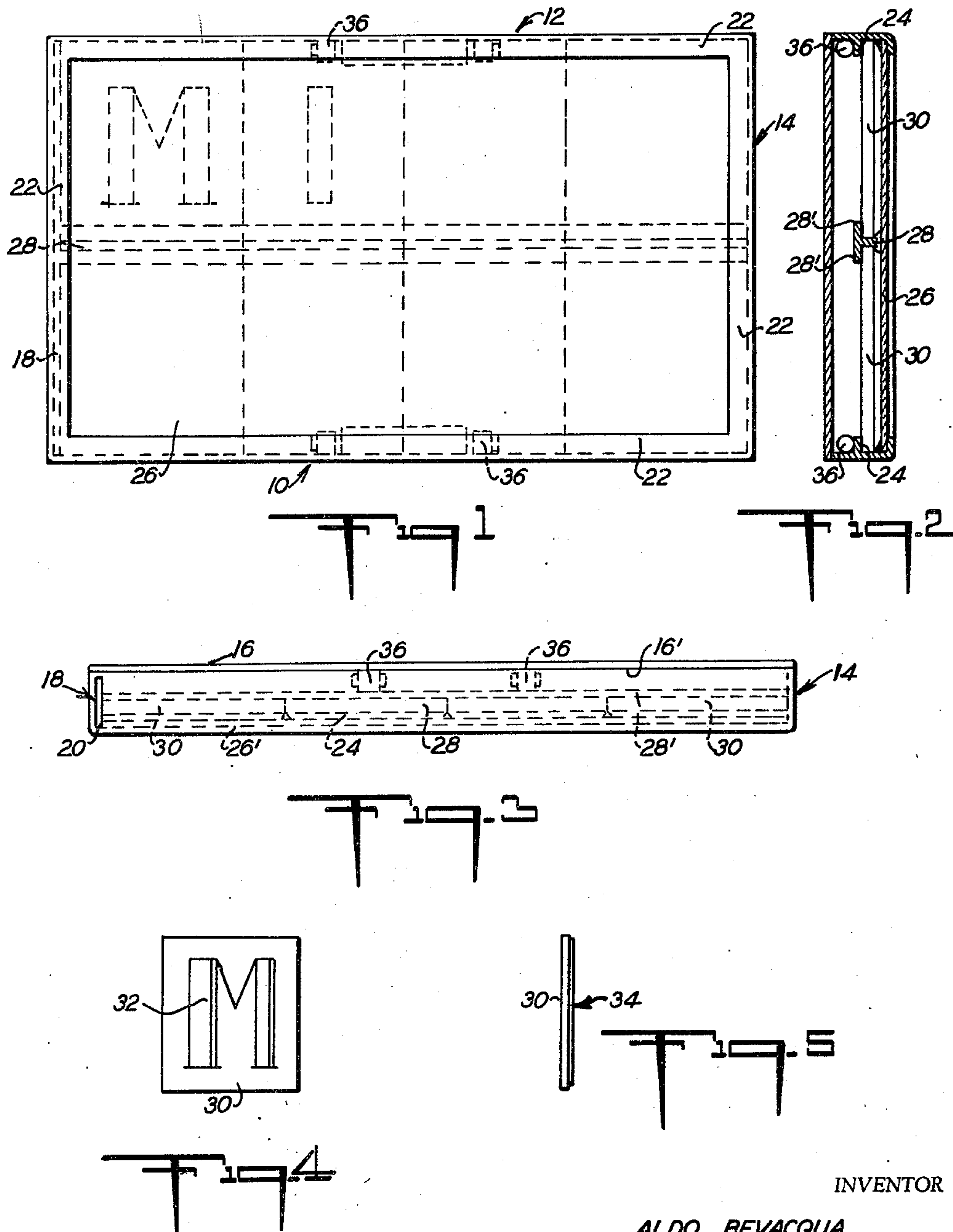
June 7, 1955

A. BEVACQUA

2,709,863

LICENSE PLATE FOR VEHICLES

Filed Feb. 26, 1951



INVENTOR

ALDO BEVACQUA

BY *Herbert J. Jasobi*

ATTORNEY

1

2,709,863

LICENSE PLATE FOR VEHICLES

Aldo Bevacqua, Milan, Italy

Application February 26, 1951, Serial No. 212,815

1 Claim. (Cl. 40—132)

The invention relates to an improvement in vehicle identification means to be substituted for the usual license plates or tags, and has for an object to provide a type thereof embodying interchangeable identifying characters, letters and numerals, and means for illuminating the same in a manner to give the characters maximum visibility for greater ease in identification and at greater distances from the vehicle on which the means is mounted, which is so necessary in view of the enormous increase in present day vehicular traffic, the increase in vehicle speeds, and the frequency of accidents between vehicles, and between vehicles and pedestrians.

Another object of the invention is to provide a housing with means for ease and convenience in effecting the interchange of the identifying characters and to enclose the same and the illumination media; the housing having an open front closed by a transparent pane and a light reflecting back wall, with horizontal channels or grooves positioned immediately in rear of the pane to slidably receive the characters which are defined by transparent or translucent areas in rectangular plates of a suitable opaque sheet material, the plates being slidable through an open end of the housing into edge-to-edge relation immediately in rear of the pane.

A further object of the invention is to make the outer surfaces of the rectangular plates luminous with a phosphorescent coating bounding the identifying character defining areas so that the areas remain visible in the event of failure or extinction of the aforesaid illuminating media, particularly at night, when the areas will still be effective for identifying purposes.

Still another object of the invention is to employ a material having refractory characteristics for the formation of the pane and the rectangular plates, so that, if and when the luminosity of the phosphorescent coatings on the front surfaces of the plates become ineffective or the illuminating media fails, the identifying character areas will be made visible by light beams from the headlights of approaching vehicles.

With these objects and advantages in view, the invention resides in the certain new and useful combination, construction and arrangement of parts, as will be hereinafter more fully described, set forth in the appended claim, and illustrated in the accompanying drawing, in which:

Figure 1 is a front side elevation of the preferred embodiment of my invention;

Figure 2 is a vertical transverse sectional view;

Figure 3 is a top plan view, showing the transverse slot in the top wall of the housing adjacent its open end to receive a slide closure for retaining the pane and the plates in place, the slide closure being shown in broken lines in Figure 1;

Figure 4 is a face view of one of the identifying character bearing plates and,

Figure 5 is an edge view of the said plate, showing the phosphorescent coating on the said front face.

Referring to the drawing, and more particularly to

2

Figures 1 through 3, the invention comprises a rectangular, box-like, housing, of sheet metal, having a bottom wall 10, a top wall 12, an end wall 14, and a back wall 16, the latter wall being provided with a reflecting surface 16' at its inner side. The end of the housing, opposite from the end wall 14, is open and is to be closed by a slide element 18 insertable downwardly through a transverse slot 20, formed in the top wall 12.

The front opening of the housing is bounded at three of its sides by flanges 22 intumed from the front edges of the bottom, top and end walls 10, 12, and 14, respectively, and spaced inwardly from the flanges 22, of the bottom and top walls, are parallel ribs or flanges 24 which, with these flanges, form channels or grooves to slidably receive a panel or pane 26, of a transparent sheet material, such as glass or a plastic.

Extending horizontally within the housing, midway between the bottom and top walls 10 and 12, is a length of an angled metal 28, of T-form in cross-section, which is disposed rearwardly from the panel or pane 26 and has its oppositely disposed arms or flanges 28' directed toward and aligned with the ribs or flanges 24; the spacing between the arms or flanges 28' and the rear surface of the panel or pane 26 providing channels or grooves which, together with the other channels or grooves, slidably receive rectangular plates 30, of a suitable opaque sheet material, each of which is provided with a transparent or translucent area 32, defining an identifying character, such as the letter "M" shown on the plate 30 in Figure 4. The area of the front surface of the plate 30, bounding the transparent or translucent area 32, will preferably be made luminous by a phosphorescent coating 34, as shown in Figure 5, so as to lend visibility to the area 32, if and when other illuminating media is absent.

Mounted within the housing, on the bottom and top walls 10 and 12 in rear of the ribs or flanges 24, are pairs of spaced electric lamps 36 to illuminate the identifying character areas 32 at night, or during foggy and cloudy days; the lamps being energized from the electric current source of the vehicle on which the housing is mounted. However, in the event of the failure of the electric current, or the effectiveness of the phosphorescent coating, the panel or pane 26 and the identifying character forming areas 32 are to have refractory characteristics, so that the areas 32 will be made visible by the light beams from the headlights of approaching vehicles.

Having thus fully described my invention, it is to be understood that the words which I have used are words of description and not of limitation and that changes may be made within the purview of the appended claim, without departing from the true scope and spirit of the invention in its broader aspects.

What I claim is:

A vehicle license plate comprising a flat rectangular box having top, bottom and end walls forming a frame, the box having a front side open and said opening defined by an inwardly directed flange, said box including a back wall having a flat forwardly facing reflecting surface, a flat transparent member within the box spaced forwardly from and in a parallel plane with the reflecting surface of the back wall and positioned against the inner side of said flange and covering the opening defined by the flange, a narrow member between said transparent member and the back wall and dividing the box lengthwise between said top and bottom walls and formed to provide top and bottom longitudinal grooves, said narrow member lying in close proximity to said flat transparent member, a light producing means within the box and lying against the inner side of the top wall of the frame, one of said end walls embodying a flat strip removable through a slot in the top wall to provide an end opening giving access to the interior of the box, said strip when

removed uncovering the adjacent ends of the grooves carried by said narrow dividing member, and flat rectangular elements insertible through said end opening above and below said dividing member and engagable in said grooves, said flat elements lying against the inner face 5 of the transparent member in a plane passing between the latter and said light producing means and said rectangular elements having areas of translucency or transparency defining characters such as letters and numerals and the remaining portions of the rectangular elements 10 being opaque, and said transparent or translucent areas having a phosphorescent characteristic to remain visible upon extinction of the light producing means.

References Cited in the file of this patent

UNITED STATES PATENTS

501,690	Page -----	July 18, 1893
983,946	Stafford -----	Feb. 14, 1911
1,117,360	Evans -----	Nov. 17, 1914
1,135,144	Stafford -----	Apr. 13, 1915
1,221,277	Bostock -----	Apr. 3, 1917
1,381,038	Walshe -----	June 7, 1921
1,636,970	Sulzberger -----	July 26, 1927
1,725,206	Petersen -----	Aug. 20, 1929
2,213,868	Lucian -----	Sept. 3, 1940
2,305,750	Vokaty -----	Dec. 22, 1942