

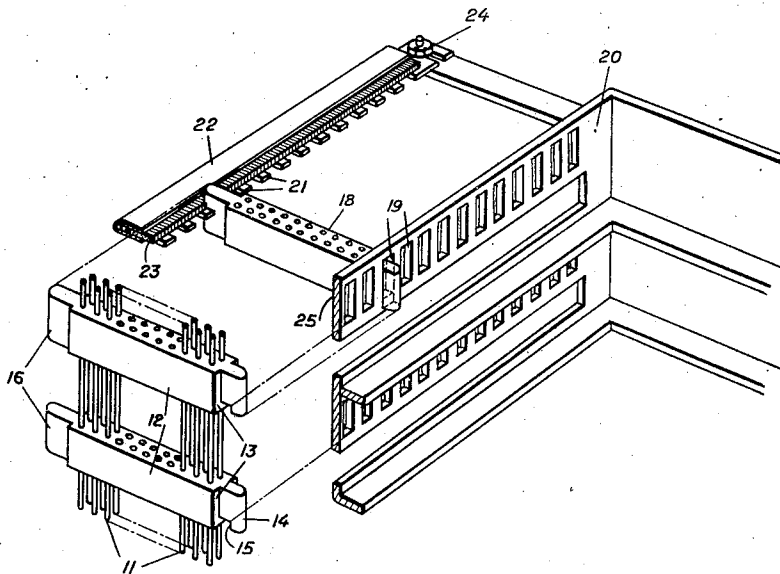
Dec. 31, 1940.

D. L. LIENZÉN

2,226,666

SELECTOR MULTIPLES

Filed Oct. 19, 1938



D. L. Lienzén
Inventor

by *Glascok Downing & Seabolt*
Attys.

UNITED STATES PATENT OFFICE

2,226,666

SELECTOR MULTIPLES

David Laurentius Lienzén, Stockholm, Sweden,
assignor to Telefonaktiebolaget L. M. Ericsson,
Stockholm, Sweden, a company of Sweden

Application October 19, 1938, Serial No. 235,856
In Sweden December 21, 1937

4 Claims. (Cl. 175—306)

The present invention relates to selectors of the kind used in automatic telephone systems, and it relates more particularly to an arrangement in such selector multiples in which the stationary contact parts consist of bare wires combined to form wire bundles with the aid of spacing members of insulating material.

In the known arrangements the spacing members are secured to metal disks mounted in a frame, said metal disks serving to support the bundle of wires.

The object of the present invention is to render possible a lighter construction and also to facilitate erection work. This object is attained by an arrangement wherein the insulated spacing members for a bundle of wires are formed in such a manner as to provide supporting members so that the wire bundle can be mounted by means of said supporting members directly in a frame or selector compartment. To insure the positioning of the wire bundles at the correct distance from the movable parts of the selector, the supporting members are preferably provided with an abutting surface or guide surface which when assembling the selector is placed against a plane surface in the selector frame.

The invention will now be explained more in detail having reference to the drawing attached to this specification and forming part thereof, which drawing shows an embodiment of the invention.

Referring to the drawing 11 is a bundle of wires cast into supporting members 12 of insulating material. The supporting members 12 are formed at one end with a plane abutting surface 13. During the casting operation the distances of the wires from said abutting surface is so adjusted that said distances become exactly the same for all supporting members. At the same end of each supporting member there is provided guide means or a guide extension 14 which projects from the shoulder surface 13, said guide extension being formed at its lower portion with a hook or nose 15. Also at the other end of the supporting member there is provided a projection 16. The wire bundle 11 with its appertaining supporting members is mounted in a selector frame 20 in the manner illustrated by the member 18 shown on the drawing as mounted in the selector frame 20. The shoulder surface of the supporting member bears against a plane surface 25 on the frame, and the guide extension 14 projects into a guide aperture 19 in the frame. The nose 15 holds the supporting member in position and insures that during erection work the supporting member does not slide out of the aperture 19.

The projection 16 provided at the other end of the supporting member is fitted between two tongues 21 provided on a guide ledge 22. Inserted in the ledge 22 is a rubber packing 23 against which the supporting member bears by means of its guide extension. When all the wire bundles belonging to the selector frame 20 have been erected with their appertaining supporting members extending between the plane surface 25 and the ledge 22, the ledge is secured to the selector frame by screw means 24 provided at both ends of the ledge 22. Said screw means are so formed as to enable the distance of the guide ledge from the plane surface 25 to be varied.

The supporting members are preferably positioned at a distance from each other which is equal to the height occupied by one selecting mechanism.

The thickness of the supporting members in the direction of the wires is so great that the individual wires will be rigidly held in the supporting members. In this manner a construction is obtained in which the pressure of the selector arm against the individual wires will only insignificantly change the position of the wires.

I claim:

1. In an automatic telephone system, a group of bare wires, a supporting member for the wires extending transversely thereof and consisting of rigid insulating material embracing the wires and maintaining the wires spaced from each other, a flat surface carried by the supporting member adjacent one end thereof and arranged substantially parallel with respect to said wires, an apertured selector frame, an extension projecting from said flat surface adapted to be arranged in an aperture of said selector frame with said flat surface abutting against said frame, a hook carried by said extension for maintaining the extension in said aperture, a projection carried by the other end of the supporting member, and adjustable means engaging said projection.

2. In an automatic telephone system, a group of bare wires, a supporting member for the wires extending transversely thereof and consisting of rigid insulating material maintaining the wires spaced from each other, an abutting surface carried by the supporting member adjacent one end thereof, an apertured selector frame, an extension projecting from said abutting surface adapted to be arranged in an aperture of said selector frame whereby said abutting surface engages the selector frame adjacent said aperture, means for maintaining the extension in said aperture, and means

for supporting the other end of said supporting member.

3. In an automatic telephone system, a plurality of groups of bare wires, a supporting member for the wires of each group, each supporting member extending transversely of the wires and consisting of rigid insulating material maintaining the wires of each group spaced from each other, an abutting surface carried by each supporting member adjacent one end thereof, the abutting surface of each supporting member being equally spaced from the wires thereof, an apertured selector frame, an extension projecting from the abutting surface of each supporting member, each extension being adapted to be arranged in an aperture of said selector frame whereby the abutting surfaces of the supporting members engage the selector frame adjacent said apertures, means for maintaining said extensions in said apertures,

and means for supporting the opposite end of said supporting members.

4. In an automatic telephone system, a group of bare wires, a supporting member for the wires extending transversely thereof and consisting of rigid insulating material maintaining the wires spaced from each other, an abutting surface carried by the supporting member adjacent one end thereof, an apertured selector frame, an extension projecting from said abutting surface adapted to be arranged in an aperture of said selector frame whereby said abutting surface engages the selector frame adjacent said aperture, means for maintaining the extension in said aperture, a projection carried by the other end of said supporting member, an adjustable ledge member carried by said selector frame, and yieldable means carried by the ledge member for engaging said projection.

DAVID LAURENTIUS LIENZÉN.