

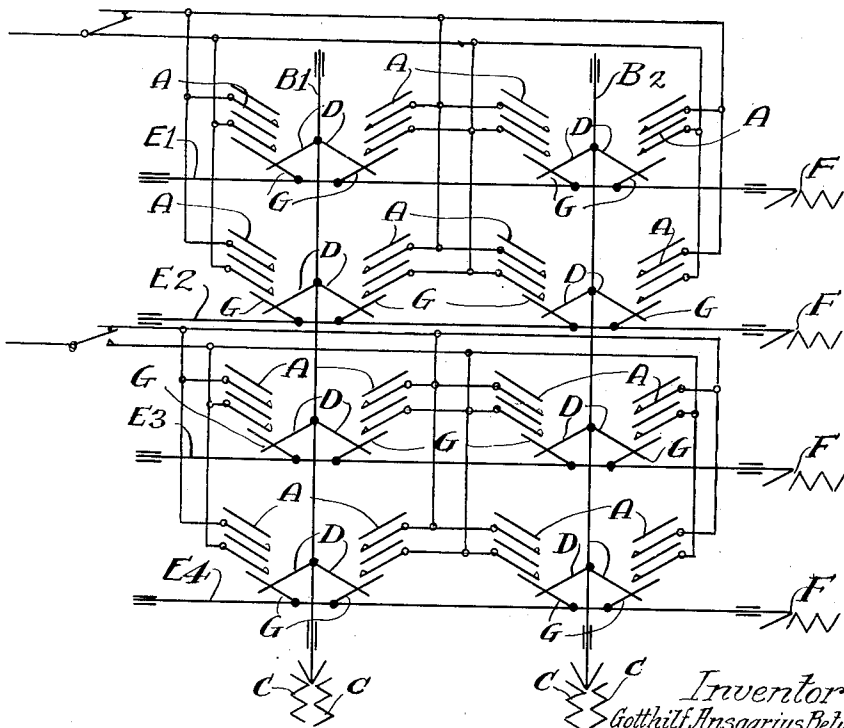
Aug. 22, 1933.

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1,924,064

ARRANGEMENT IN RELAY COMBINATION GROUPS

Filed Dec. 22, 1928



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# UNITED STATES PATENT OFFICE

1,924,064

## ARRANGEMENT IN RELAY-COMBINATION GROUPS

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Application December 22, 1928, Serial No. 328,041, and in Sweden January 25, 1928

1 Claim. (Cl. 179—27.54)

This invention relates to an arrangement in so called relay-combination groups for telephone systems and is provided with indicating and connecting members of any kind and has for object to increase the capacity of the combination group without the indicating or connecting member of the combination group itself or both being increased.

The figure shows schematically an arrangement of contact groups in accordance with this invention.

In the arrangement here shown there is provided a pair of bars B1 and B2. Extending across these bars are bars E1, E2, E3 and E4. At the intersection of each pair of intersecting bars, and here shown as above that intersection, are pairs of contact groups A, the two groups of each pair being on opposite sides of the respective bar. Carried by each of the bars B1 and B2 are pairs of indicating or actuating arms D for each pair of contact groups A and these arms are selectively operable by means of pairs of magnets C arranged at the opposite sides of the bars B. Similarly each bar E1, E2, E3

and E4 carries pairs of contact operating arms G controlled by magnets F. The groups A thus form contacts for the transfer switches indicated by lines and by selectively energizing the magnets C and F any desired contact group may be opened or closed. Obviously the arrangement is not limited to the number of bars B and bars E shown.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

In selecting means for telephone systems, indicating and connecting members, and a plurality of contact groups each composed of duplicate contacts sets, each contact of a set in a group being connected with the corresponding contact of the appertaining set of the total contact groups to form a common contact system, transfer switches adapted to cut in said duplicate contact sets alternatively into circuits, and a single movable member replacing two adjacent indicating members.

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