fhat I claim is:

key loord with a number of sifferent leys equal to the product of the
numbry of the cinhering cinannels of each cirhering means, selector bars
the number of whoch as equel to the sum of the ciphei ing channezs
of the cirheving means, eack key acting respectively on one selector -
bar falonging to each dirhering means and a translating mechanism

- Ith selector memrers.controlled $r y$ the seid selector bars and the !
gald cirrexink megns.

2. A cirharing machine, comprising a glurality of electrical
cirherine means, cirt. ring charncls on the EEId cifhesing means. a
key loard mith a number of AxEferent keys ecual to the product of the
numbers of tine cir's manf chanalis of each cirhering means, selector bars
the butrer of which $2 s$ equal to the sum of the cirhering ctrannels

Of the cirfi-ming set us each key acting ressectively on one selector Approved for Release by NSA on 06-17-2014 pursuant to E.O. 13520
bar belonging to each ciphering means and a translating mechanism with selector members controlled by the said selector bar and the said cyphering means. with a number of different keys equal to the product of the numbers of the ciphering channels of each cipher fig means, selector bars the number of which is equal to the sum of the ciphering channels ' of the ciphering means each key acting respectively on one selector bar belonging to each ciphering means, and a translating mechanism with selector members the number of which $1 s$ equal to the sum of the ciphering channels said selector members being controlled by
the said selector bars mhd the said ciphering means.
5. A ciphering machine, comprising a plurality of ciphering means, ciphering channels on the said ciphering means, a key board pith a number of different keys equal to the product of the numbers of the cirhering channels of each ciphering means, selector bars the number of which 18 equal to the sum of the ciphering channels of the cipher i ne means each ley acting respectively on one selector bar belonging to each ciphering means and a translating mechanism "It. selector members the number of which $2 s$ equal to the sum of the ciphering channels less a number at the most equal to the number of the ciphering means, said srlector member being controlled by the said selector bars and the said ciphering means.
6. A ciexhering machine, comprising a plurality of ciphering mears, ciphering channels on the said ciphering meang, a key board, with a number of different keys equal to the prodyct of the number of the ciphering channels of each ciphering meand, selector bars the number of which is equal to the sum of the chering channels of the caphering means each. key acting reflectively on one seledtor bar belonging to each ciphering means a franslating mechanism with selector members controlled by the said selector bars and the said ciphering means, and means for reversing the ciphering channels. means, ciphering channels on the sald ciphering means, a keyboard with a number of different keys equal to the product of the numbers of the cirhering channels of each ciphering means, selector bars the number of which is equal to the sum of the ciphering channels of the ciphering means, each key acting respectively on one selector har belonging to each ciphering means, a translating mechanism With selector members controlled by the said selector bers and the said ciphering means, and means for reversing the ciphering channels and f/or by-passing the same.
8. ciphering machine, comprising a plurality of cirhering means, ciphering channels on the said ciphering means, a key board wath a nưmber of different keys equal to the product of the numbers of the/ciphering channels of each ciphering means, selector bars the number of which is equal to the sum of the ciphering channels
of the cirhering means, each key acting respectively on one'selector






Rg. 11
B9.2


Inventor


$$
\begin{gathered}
\text { Inventor } \\
\text { B. C W. Hagelin } \\
\text { By }+ \text { Wenderoth } \\
\text { At+y }
\end{gathered}
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