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FTD-ID(RS)T-1851-79

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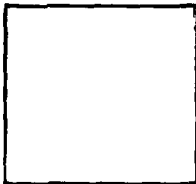


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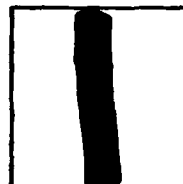
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INVENTORY

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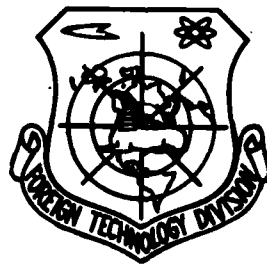
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COMMUTATOR

by

P. N. Dashuk



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EDITED TRANSLATION

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COMMUTATOR

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U. S. BOARD ON GEOGRAPHIC NAMES TRANSLITERATION SYSTEM

Block	Italic	Transliteration	Block	Italic	Transliteration
А а	А а	A, a	Р р	Р р	R, r
Б б	Б б	B, b	С с	С с	S, s
В в	В в	V, v	Т т	Т т	T, t
Г г	Г г	G, g	У у	У у	U, u
Д д	Д д	D, d	Ф ф	Ф ф	F, f
Е е	Е е	Ye, ye; E, e*	Х х	Х х	Kh, kh
Ж ж	Ж ж	Zh, zh	Ц ц	Ц ц	Ts, ts
З з	З з	Z, z	Ч ч	Ч ч	Ch, ch
И и	И и	I, i	Ш ш	Ш ш	Sh, sh
Й й	Й й	Y, y	Щ щ	Щ щ	Shch, shch.
К к	К к	K, k	Ъ ъ	Ъ ъ	"
Л л	Л л	L, l	Ы ы	Ы ы	Y, y
М м	М м	M, m	Ь ь	Ь ь	'
Н н	Н н	N, n	Э э	Э э	E, e
О о	О о	O, o	Ю ю	Ю ю	Yu, yu
П п	П п	P, p	Я я	Я я	Ya, ya

*ye initially, after vowels, and after ъ, ь; e elsewhere.
When written as ě in Russian, transliterate as yĕ or ě.

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

Russian	English	Russian	English	Russian	English
sin	sin	sh	sinh	arc sh	arcsin
cos	cos	ch	cosh	arc ch	arcosh
tg	tan	th	tanh	arc th	arctan
ctg	cot	cth	coth	arc cth	arcot
sec	sec	sch	sech	arc sch	secant
cosec	csc	csch	csch	arc csch	cosecant

Russian English

rot curl
lg log

COMMUTATOR

P. N. Dashuk

Leningrad Polytechnical Institute im. M. I. Kalinin

This invention pertains to the gas-discharge commutators used primarily in capacitive accumulators of energy of the electro-physical installations.

There are gas-discharge commutators containing a gas-discharge dielectric chamber, at least two electrodes located in the chamber one opposite the other, and contact conductors located outside the chamber and electrically connected with the electrodes.

The construction of the external insulation of the discharge chambers does not permit the current-supplying buses to come close to one another directly at the discharger, which results in an increase in the inductivity of the circuit and, in the case of high operating voltages of the accumulator, considerable difficulties arise in ensuring the necessary electrical strength at the point where the insulation of the discharger comes in contact with the insulation of the external electrical buses.

In the commutator being proposed the side walls of the discharge chamber are made out of block polyethylene with the sheets of polyethylene film welded to it. Such a design of the gas-discharge commutator makes it possible to ensure high electrical strength of the external insulation of the discharge chamber and low inductance of the current feeds to the discharger.

The drawing shows a schematic representation of the external view of a gas-discharge commutator.

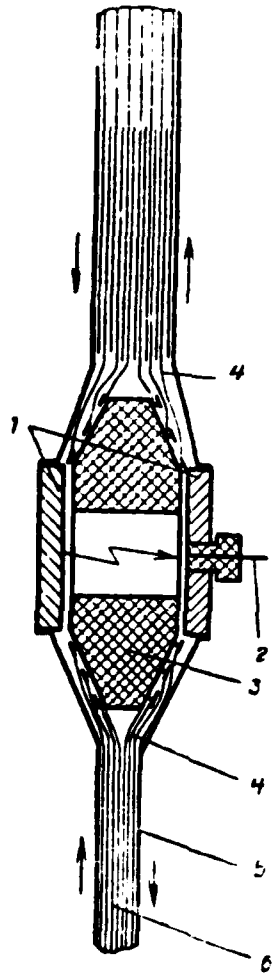
The device consists of the base electrodes 1, ignition electrodes 2, discharge chamber 3 made out of a monolithic polyethylene and sheets of polyethylene film which are welded to the external surface of the chamber along the generatrix. Current-supplying buses 5 are separated by insulation 6, sheets of film dielectric.

When voltage is fed to the electrodes of the discharger, high electrical strength of the external insulation of the device is ensured due to the high electrical strength of several serially-arranged seams of the film welded to the external surface of the chamber, despite the small distance between the electrodes. In view of the fact that it is convenient to weld the film polyethylene with the block polyethylene only at the spots where the surface of the block polyethylene parallels the surface of the film or is at a small angle to it, it is expedient to make sloping sections on the external surface of the discharge chamber and weld a sheet of film to each one individually for which similar holes were cut in the sheets with a perimeter, which decreases from sheet to sheet.

The external surface of the discharge chamber can be made differently, which is also convenient for welding the film polyethylene. In this case, steps are made on the external surface of the discharge chamber to match the number of sheets of the polyethylene film.

Object of the invention

The commutator containing a discharge dielectric chamber, at least two electrodes, and contact conductors located outside the chamber and which are electrically connected with the electrodes is distinguished by the fact that in order to decrease the inductance of the commutator, the side walls of the discharge chamber are made out of block polyethylene with sheets of polyethylene film welded to it.



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