Symbol	Typ	Titel
G	**Sektion**	**SECTION G — PHYSICS**
G05	**Klasse**	**CONTROLLING; REGULATING**
G05F	**Unterklasse**	**SYSTEMS FOR REGULATING ELECTRIC OR MAGNETIC VARIABLES (regulating the timing or recurrence frequency of pulses in radar or radio navigation systems G01S; regulation of current or voltage, specially adapted for use in electronic time-pieces G04G 19/02; closed-loop systems for regulating non-electric variables by electric means G05D; regulating power supply of digital computers G06F 1/26; for obtaining desired operating characteristics of electromagnets with armatures H01F 7/18; regulating electric power distribution networks H02J; regulating the charging of batteries H02J 7/00; regulating of the output of static converters, e.g. switching regulators, H02M; regulation of the output of electric generators H02N, H02P 9/00; controlling transformers, reactors or choke coils H02P 13/00; regulating frequency response, gain, maximum output, amplitude or bandwidth of amplifiers H03G; regulating tuning of resonant circuits H03J; controlling generators of electronic oscillations or pulses H03L; regulating characteristics of transmission lines H04B; controlling electric light sources H05B 37/02, H05B 39/04, H05B 41/36; electric control of X-ray apparatus H05G 1/30) [4, 5]**
G05F 1/00	**Hauptgruppe**	**Automatic systems in which deviations of an electric quantity from one or more predetermined values are detected at the output of the system and fed back to a device within the system to restore the detected quantity to its predetermined value or values, i.e. retroactive systems**
G05F 1/02	1-Punkt Untergruppe	. Regulating electric characteristics of arcs (arrangements for feeding or moving of electrodes for spot or seam welding or cutting B23K 9/12; arrangements for feeding electrodes for electric heating or electric lighting H05B 7/109, H05B 31/18; automatic control of power for heating by discharge H05B 7/148) [2]
G05F 1/04	2-Punkt Untergruppe	. . by means of saturable magnetic devices
G05F 1/06	2-Punkt Untergruppe	. . by means of discharge tubes
G05F 1/08	2-Punkt Untergruppe	. . by means of semiconductor devices
G05F 1/10	1-Punkt Untergruppe	. Regulating voltage or current (G05F 1/02 takes precedence; for electric railways B60M 3/02)
G05F 1/12	2-Punkt Untergruppe	. . wherein the variable is actually regulated by the final control device is ac (G05F 1/625 takes precedence) [4]
G05F 1/13	3-Punkt Untergruppe	. . . using ferroresonant transformers as final control devices [4]
G05F 1/14	3-Punkt Untergruppe	. . . using tap transformers or tap changing inductors as final control devices [4]
G05F 1/147	4-Punkt Untergruppe	. . . . with motor driven tap switch [4]
G05F 1/153	5-Punkt Untergruppe	. . . . . controlled by discharge tubes or semiconductor devices [4]
G05F 1/16	4-Punkt Untergruppe	. . . . combined with discharge tubes or semiconductor devices
G05F 1/20	5-Punkt Untergruppe	. . . . . semiconductor devices only
G05F 1/22	4-Punkt Untergruppe	. . . . combined with separate magnetic control devices having a controllable degree of saturation
G05F 1/24	3-Punkt Untergruppe	. . . using bucking or boosting transformers as final control devices
G05F 1/247	4-Punkt Untergruppe	. . . . with motor in control circuit [4]
G05F 1/253	4-Punkt Untergruppe	. . . . the transformers including plural windings in series between source and load (G05F 1/247 takes precedence) [4]
G05F 1/26	4-Punkt Untergruppe	. . . . combined with discharge tubes or semiconductor devices

Symbol	Typ	Titel
G05F 1/30	5-Punkt Untergruppe	. . . . . semiconductor devices only
G05F 1/32	3-Punkt Untergruppe	. . . using magnetic devices having a controllable degree of saturation as final control devices
G05F 1/325	4-Punkt Untergruppe	. . . . with specific core structure, e.g. gap, aperture, slot, permanent magnet [4]
G05F 1/33	4-Punkt Untergruppe	. . . . with plural windings through which current to be controlled is conducted [4]
G05F 1/335	5-Punkt Untergruppe	. . . . . on different cores [4]
G05F 1/34	4-Punkt Untergruppe	. . . . combined with discharge tubes or semiconductor devices
G05F 1/38	5-Punkt Untergruppe	. . . . . semiconductor devices only
G05F 1/40	3-Punkt Untergruppe	. . . using discharge tubes or semiconductor devices as final control devices
G05F 1/42	4-Punkt Untergruppe	. . . . discharge tubes only
G05F 1/44	4-Punkt Untergruppe	. . . . semiconductor devices only
G05F 1/445	5-Punkt Untergruppe	. . . . . being transistors in series with the load [3]
G05F 1/45	5-Punkt Untergruppe	. . . . . being controlled rectifiers in series with the load [3]
G05F 1/455	6-Punkt Untergruppe	. . . . . with phase control [3]
G05F 1/46	2-Punkt Untergruppe	. . wherein the variable actually regulated by the final control device is dc (G05F 1/625 takes precedence) [4]
G05F 1/52	3-Punkt Untergruppe	. . . using discharge tubes in series with the load as final control devices
G05F 1/54	4-Punkt Untergruppe	. . . . additionally controlled by the unregulated supply
G05F 1/56	3-Punkt Untergruppe	. . . using semiconductor devices in series with the load as final control devices
G05F 1/563	4-Punkt Untergruppe	. . . . including two stages of regulation, at least one of which is output level responsive, e.g. coarse and fine regulation [4]
G05F 1/565	4-Punkt Untergruppe	. . . . sensing a condition of the system or its load in addition to means responsive to deviations in the output of the system, e.g. current, voltage, power factor (G05F 1/563 takes precedence) [4]
G05F 1/567	5-Punkt Untergruppe	. . . . . for temperature compensation [4]
G05F 1/569	5-Punkt Untergruppe	. . . . . for protection [4]
G05F 1/571	6-Punkt Untergruppe	. . . . . with overvoltage detector [4]
G05F 1/573	6-Punkt Untergruppe	. . . . . with overcurrent detector [4]
G05F 1/575	4-Punkt Untergruppe	. . . . characterised by the feedback circuit [4]
G05F 1/577	4-Punkt Untergruppe	. . . . for plural loads [4]
G05F 1/585	5-Punkt Untergruppe	. . . . . providing voltages of opposite polarities [4]
G05F 1/59	4-Punkt Untergruppe	. . . . including plural semiconductor devices as final control devices for a single load [4]
G05F 1/595	5-Punkt Untergruppe	. . . . . semiconductor devices connected in series [4]
G05F 1/607	3-Punkt Untergruppe	. . . using discharge tubes in parallel with the load as final control devices [3]
G05F 1/61	4-Punkt Untergruppe	. . . . including two stages of regulation, at least one of which is output level responsive [4]
G05F 1/613	3-Punkt Untergruppe	. . . using semiconductor devices in parallel with the load as final control devices [3]

Symbol	Typ	Titel
G05F 1/614	4-Punkt Untergruppe	. . . . including two stages of regulation, at least one of which is output level responsive [4]
G05F 1/618	3-Punkt Untergruppe	. . . using semiconductor devices in series and in parallel with the load as final control devices [4]
G05F 1/62	3-Punkt Untergruppe	. . . using bucking or boosting dc sources
G05F 1/625	2-Punkt Untergruppe	. . wherein it is irrelevant whether the variable actually regulated is ac or dc [4]
G05F 1/63	3-Punkt Untergruppe	. . . using variable impedances in series with the load as final control devices [4]
G05F 1/635	4-Punkt Untergruppe	. . . . being Hall effect devices, magnetoresistors or thermistors [4]
G05F 1/644	4-Punkt Untergruppe	. . . . being pressure-sensitive resistors [4]
G05F 1/648	4-Punkt Untergruppe	. . . . being plural resistors among which a selection is made [4]
G05F 1/652	3-Punkt Untergruppe	. . . using variable impedances in parallel with the load as final control devices [4]
G05F 1/656	3-Punkt Untergruppe	. . . using variable impedances in series and in parallel with the load as final control devices [4]
G05F 1/66	1-Punkt Untergruppe	. Regulating electric power
G05F 1/67	2-Punkt Untergruppe	. . to the maximum power available from a generator, e.g. from solar cell [4]
G05F 1/70	1-Punkt Untergruppe	. Regulating power factor; Regulating reactive current or power [3]
G05F 3/00	**Hauptgruppe**	**Non-retroactive systems for regulating electric variables by using an uncontrolled element, or an uncontrolled combination of elements, such element or such combination having self-regulating properties**
G05F 3/02	1-Punkt Untergruppe	. Regulating voltage or current
G05F 3/04	2-Punkt Untergruppe	. . wherein the variable is ac
G05F 3/06	3-Punkt Untergruppe	. . . using combinations of saturated and unsaturated inductive devices, e g. combined with resonant circuit
G05F 3/08	2-Punkt Untergruppe	. . wherein the variable is dc
G05F 3/10	3-Punkt Untergruppe	. . . using uncontrolled devices with non-linear characteristics [4]
G05F 3/12	4-Punkt Untergruppe	. . . . being glow discharge tubes
G05F 3/16	4-Punkt Untergruppe	. . . . being semiconductor devices [3]
G05F 3/18	5-Punkt Untergruppe	. . . . . using Zener diodes [3]
G05F 3/20	5-Punkt Untergruppe	. . . . . using diode-transistor combinations (G05F 3/18 takes precedence) [3]
G05F 3/22	6-Punkt Untergruppe	. . . . . wherein the transistors are of the bipolar type only (G05F 3/26, G05F 3/30 take precedence) [4]
G05F 3/24	6-Punkt Untergruppe	. . . . . wherein the transistors are of the field-effect type only (G05F 3/26, G05F 3/30 take precedence) [4]
G05F 3/26	6-Punkt Untergruppe	. . . . . Current mirrors [4]
G05F 3/28	7-Punkt Untergruppe	. . . . . combined with a non-linear current amplifier [4]
G05F 3/30	6-Punkt Untergruppe	. . . . . Regulators using the difference between the base-emitter voltages of two bipolar transistors operating at different current densities (G05F 3/26 takes precedence) [4]
G05F 5/00	**Hauptgruppe**	**Systems for regulating electric variables by detecting deviations in the electric input to the system and thereby controlling a device within the system to obtain a regulated output**
G05F 5/02	1-Punkt Untergruppe	. Phase controlled switching using electronic tubes or three or more terminal semiconductive devices [4]
G05F 5/04	1-Punkt Untergruppe	. using a transformer or inductor as the final control device [4]

Symbol	Typ	Titel
G05F 5/06	2-Punkt Untergruppe	. . saturable [4]
G05F 5/08	1-Punkt Untergruppe	. using a linearly acting final control device [4]
G05F 7/00	**Hauptgruppe**	**Regulating magnetic variables (details of apparatus for measuring magnetic variables involving magnetic resonance G01R 33/28) [5]**