

PHILIPS**6CJ6****LINE TIME BASE AND SOUND OUTPUT PENIODE**Physical Specifications

Cathode	Coated unipotential
Base	Small button noval 9-pin
Bulb	T6 $\frac{1}{2}$
Maximum overall length	3 $\frac{3}{16}$ "
Maximum seated height	2 $\frac{15}{16}$ "
Bulb length excluding top cap	2 $\frac{7}{16}$ " $\pm$ $\frac{3}{32}$ "
Maximum diameter	$\frac{7}{8}$ "
Mounting position	any
Basing connections - JETEC	
basing designation	9AS

Pin 1 - Internally connected

Bottom view
of baseTube outline

Pin 2 - Grid No.1

Pin 3 - Cathode

Pin 4 - Heater

Pin 5 - Heater

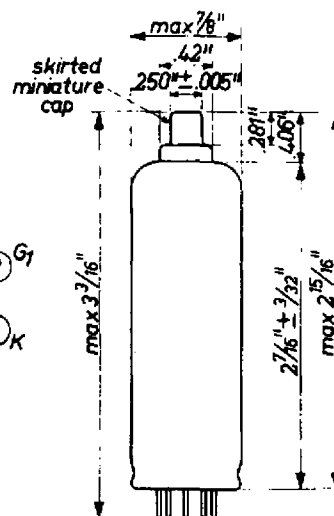
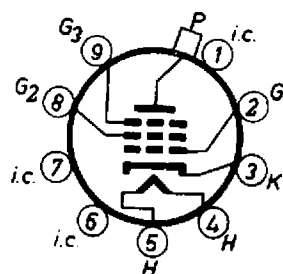
Pin 6 - Internally connected

Pin 7 - Internally connected

Pin 8 - Grid No.2

Pin 9 - Grid No.3

Cap - Plate

General Electrical DataHeater data

Heater voltage	6.3 volts
Heater current	1.05 amps

Direct Interelectrode Capacitances

Grid No.1 to all other electrodes	14.7 μ F
Plate to all other electrodes	6.0 μ F
Plate to grid No.1	max. 0.8 μ F
Plate to cathode	max. 0.1 μ F
Grid No.1 to heater	max. 0.2 μ F

Ratings (Design center values)

Plate voltage(without current)	max.	550 volts
Peak positive surge plate voltage	max.	7000 volts ¹⁾
Peak negative surge plate voltage	max.	7000 volts ¹⁾
Average plate voltage	max.	300 volts
Plate dissipation	max.	8 watts
Grid No.2 dissipation	max.	4.5 watts
Plate dissipation + grid No.2 dissipation	max.	10 watts
Grid No.2 voltage(without current)	max.	550 volts
Grid No.2 voltage	max.	300 volts
Cathode current	max.	180 ma
Grid No.1 current starting point.		
Grid No.1 voltage at grid No.1 current = +0.3 μamp	max.	-1.3 volts
Grid No.1 circuit resistance	max.	0.5 megohm
External resistance between heater and cathode	max.	20,000 ohms
Voltage between heater and cathode	max.	100 volts

Typical characteristics

Plate voltage	250 volts
Grid No.3 voltage	0 volt
Grid No.2 voltage	250 volts
Grid No.1 voltage	-38.5 volts
Plate current	32 ma
Grid No.2 current	2.4 ma
Transconductance	4600 micromhos
Plate resistance	15,000 ohms
Amplification factor of grid No.2 with respect to grid No.1	5.1

¹) Maximum permissible pulse duration 18 % of one cycle, with a maximum of 18 μ sec.

Remark for use in line time base output stages

To allow for tube spread and for deterioration during life, the circuit should be designed around a peak anode current not exceeding

250 m amps at a plate voltage of 70 volts and a grid No.2 voltage of 170 volts, or

310 m amps at a plate voltage of 70 volts and a grid No.2 voltage of 200 volts.

The peak anode current of an average new tube at a plate voltage of 70 volts and a grid No.1 voltage of -1 volt is

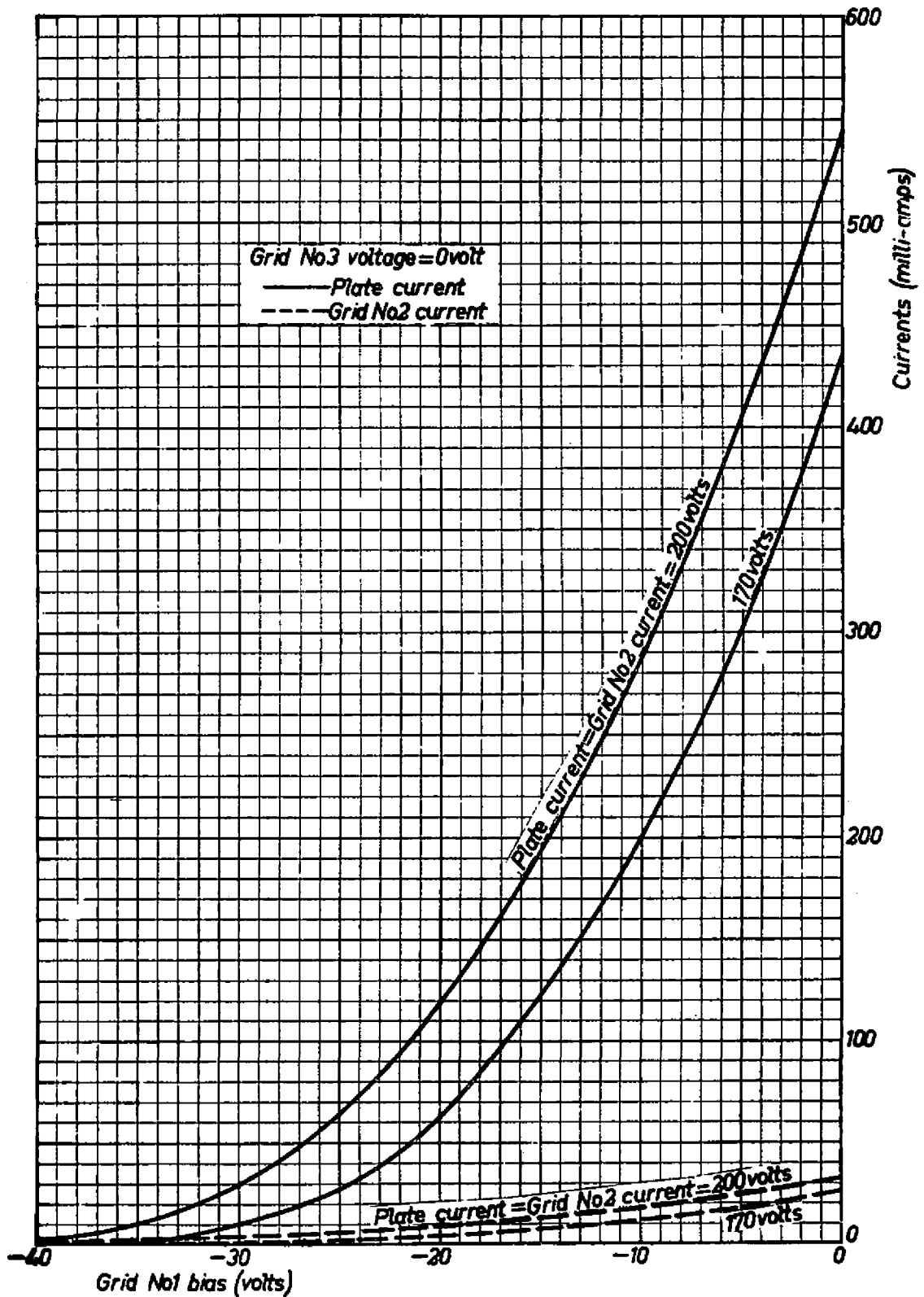
380 m amps at a grid No.2 voltage of 170 volts, and
470 m amps at a grid No.2 voltage of 200 volts.

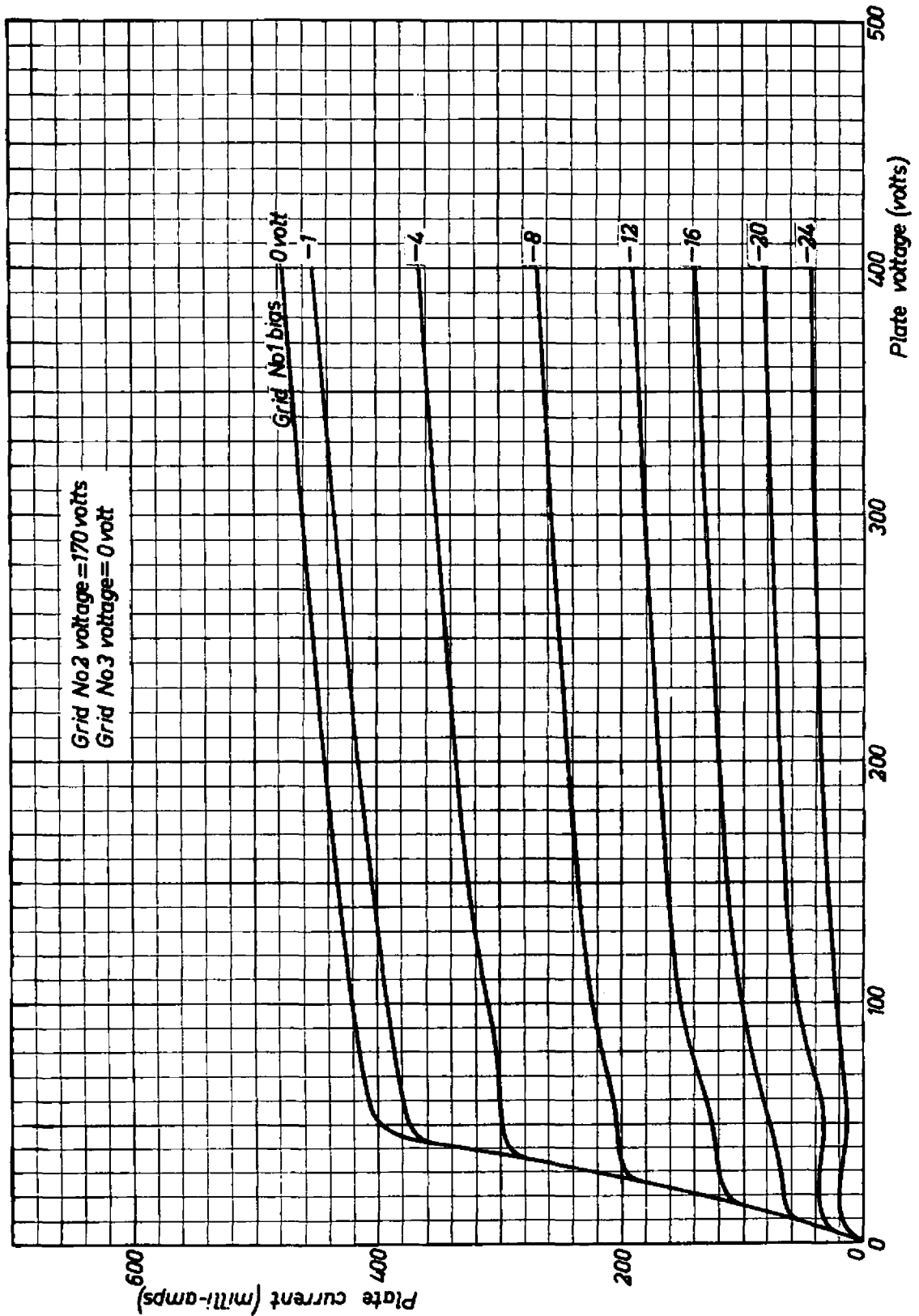
Operating characteristics of two tubes as class B push-pull sound amplifier

Plate voltage	170	200	volts
Grid No.3 voltage	0	0	volt
Grid No.2 voltage	170	200	volts
Common grid No.2 resistor	1000	1000	ohms
Grid No.1 voltage	-27	-31.5	volts
Load resistance plate to plate	2500	2500	ohms
Input A.C.voltage	0 19	0 22.5	volts,rms
Plate current	2x20 2x73	2x25 2x87	ma
Grid No.2 current	2x1.5 2x10	2x2.0 2x12.5	ma
Output	0 13.5	0 20	watts
Total distortion	- 5.5	- 5.5	%

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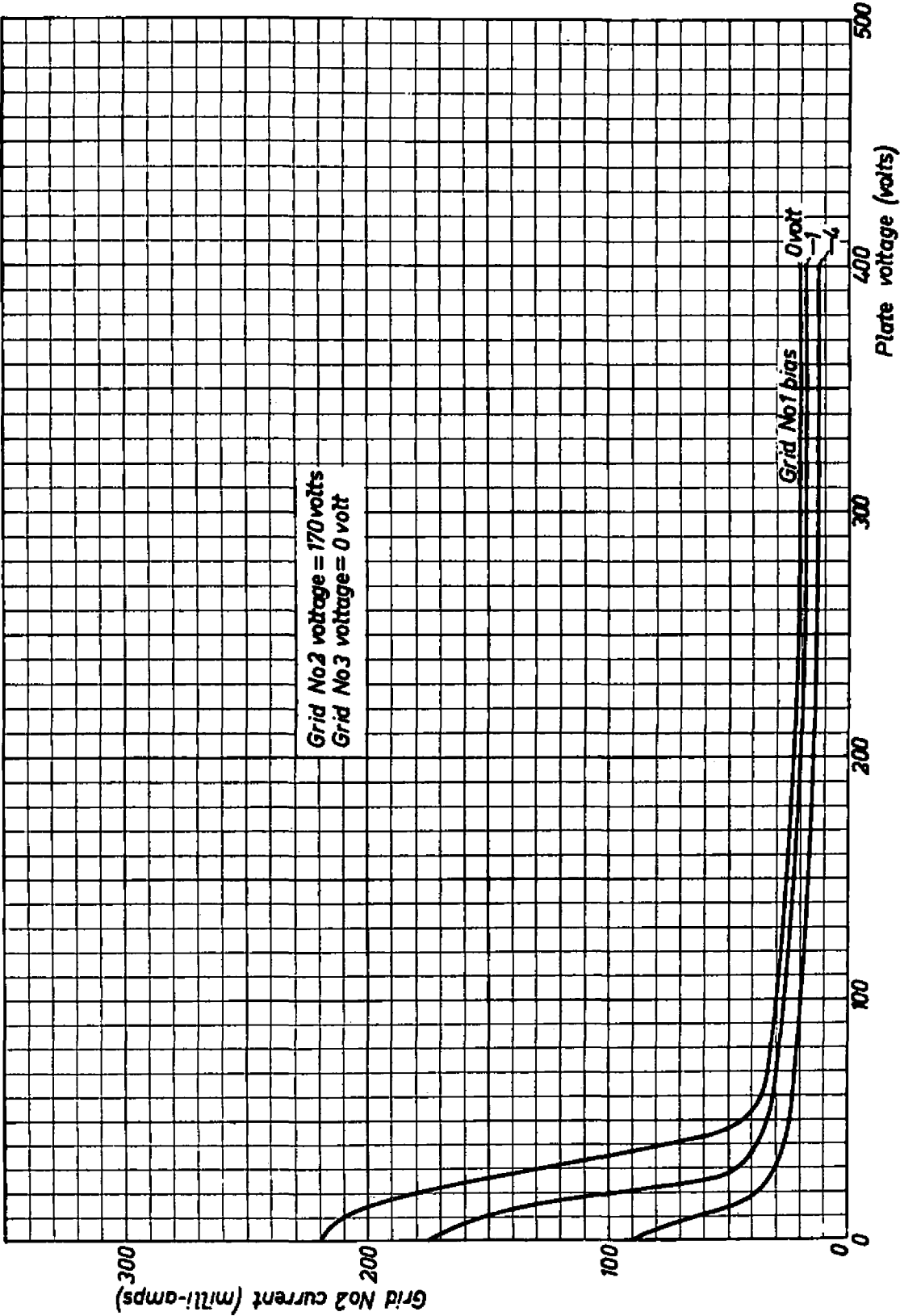
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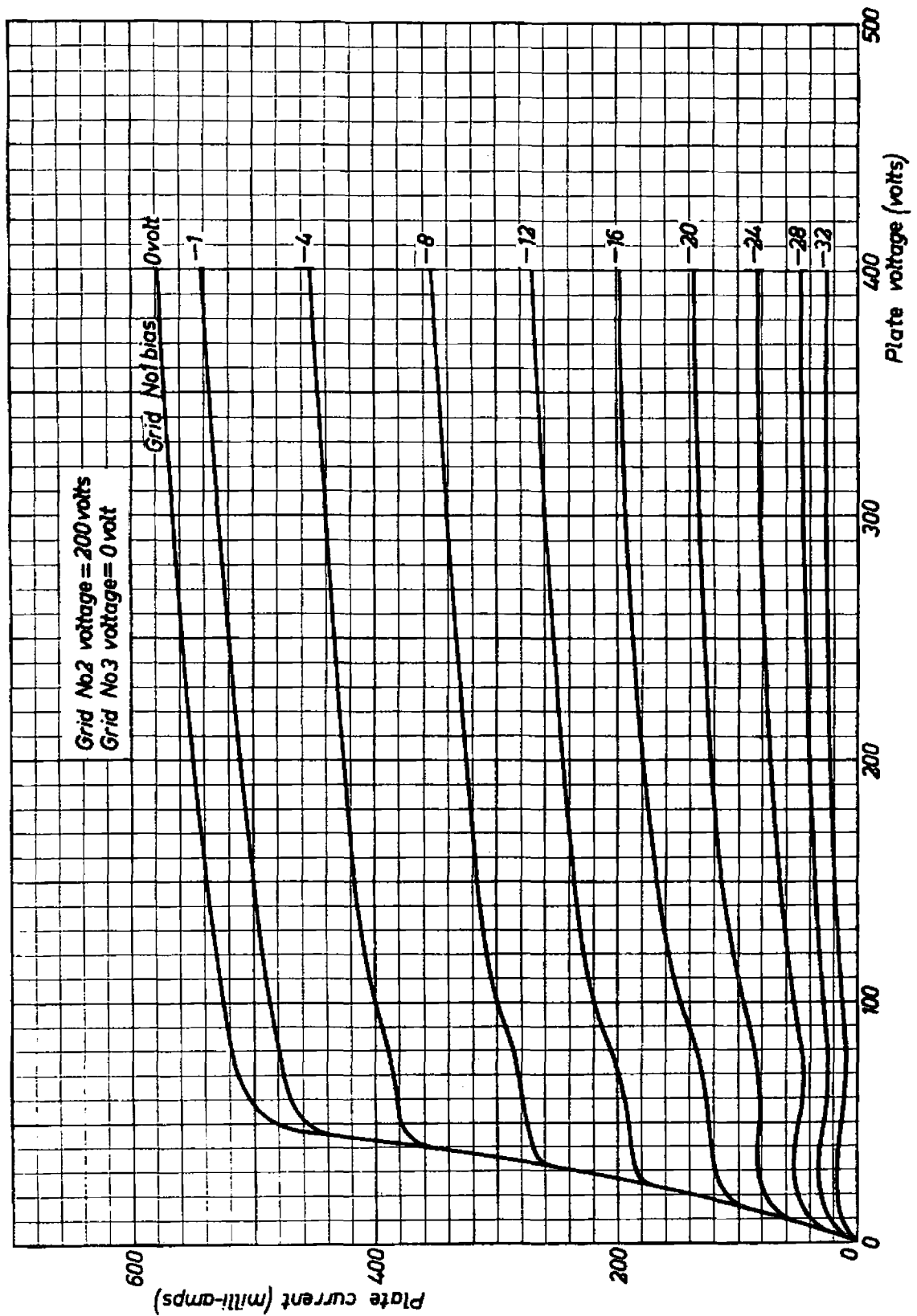
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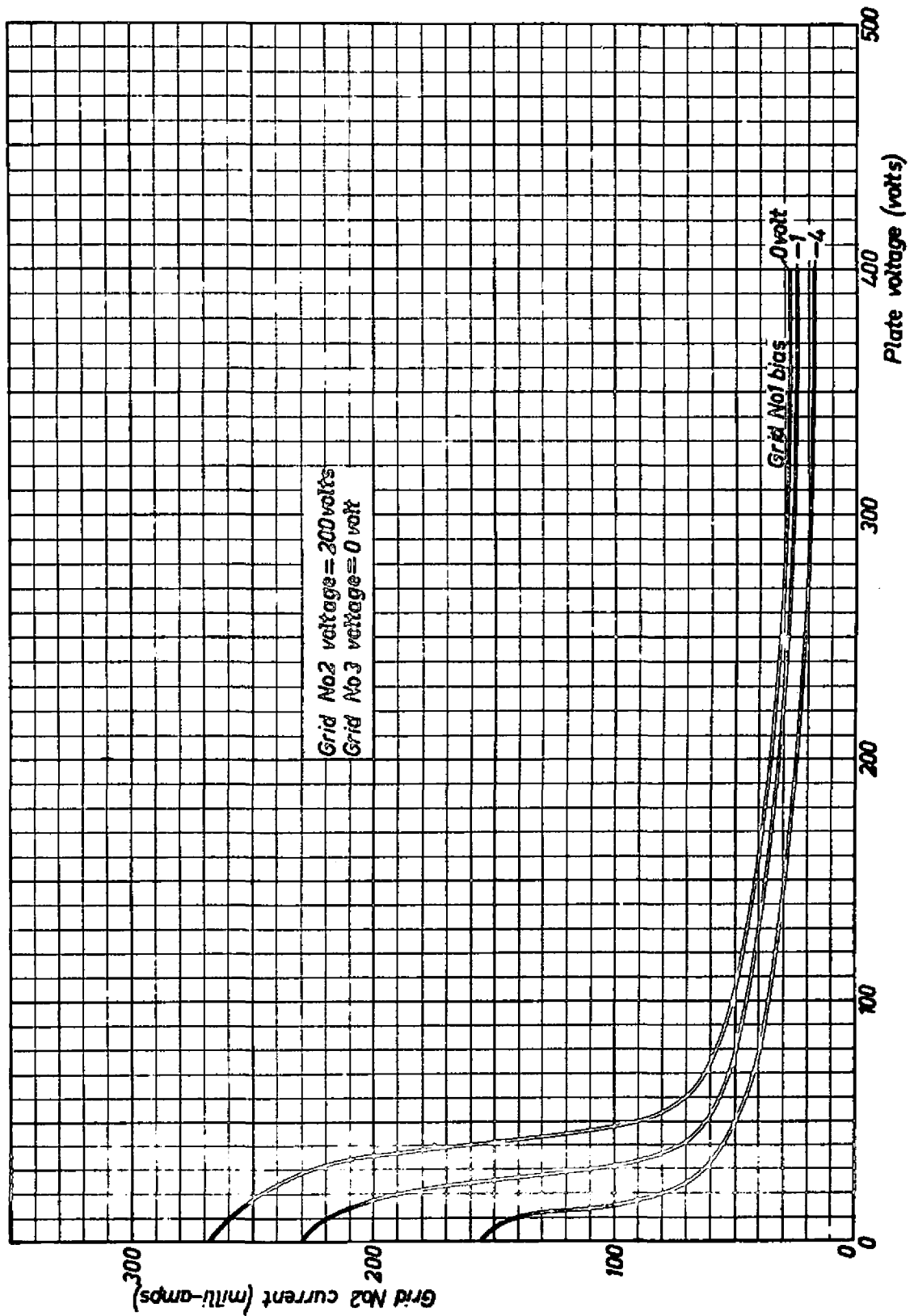
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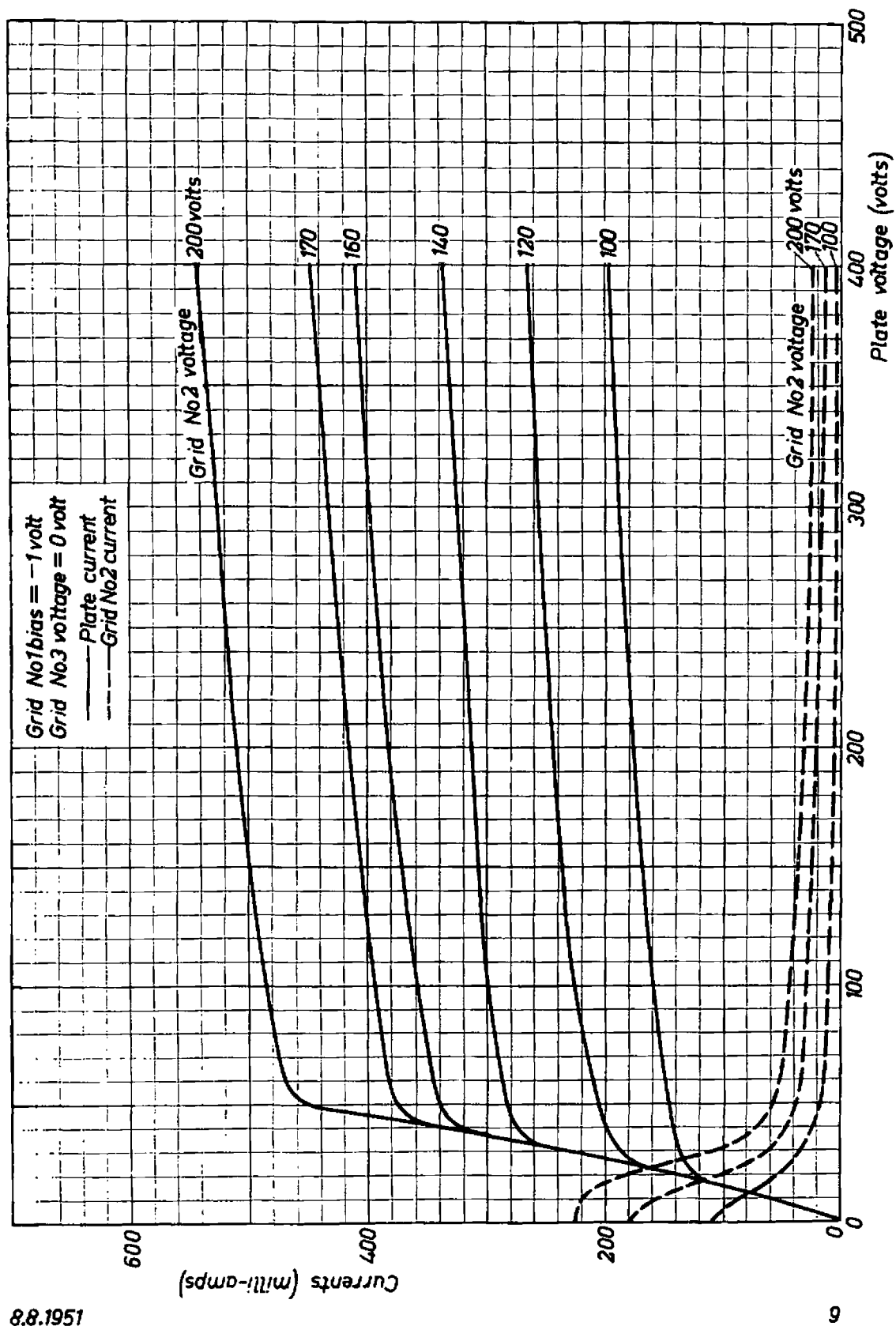
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