

Fig. 1

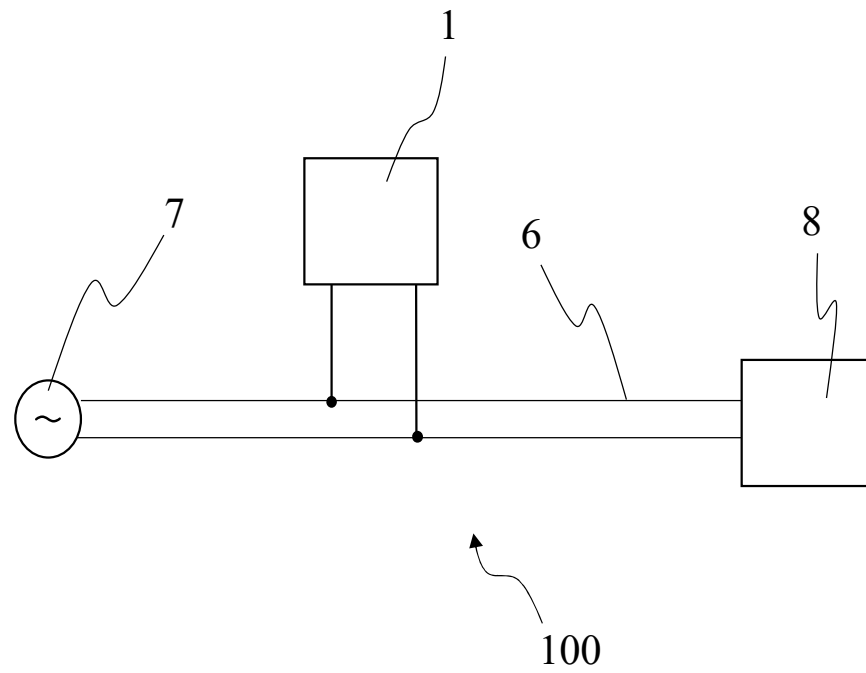


Fig. 2

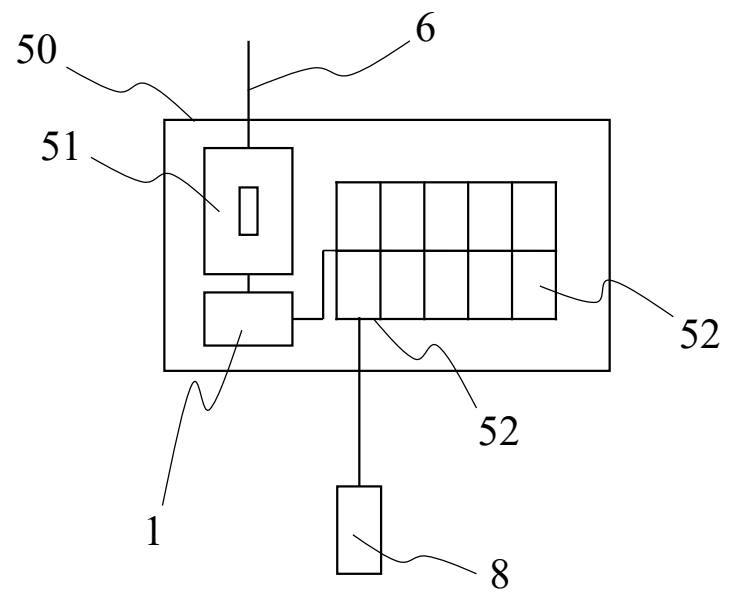


Fig. 3

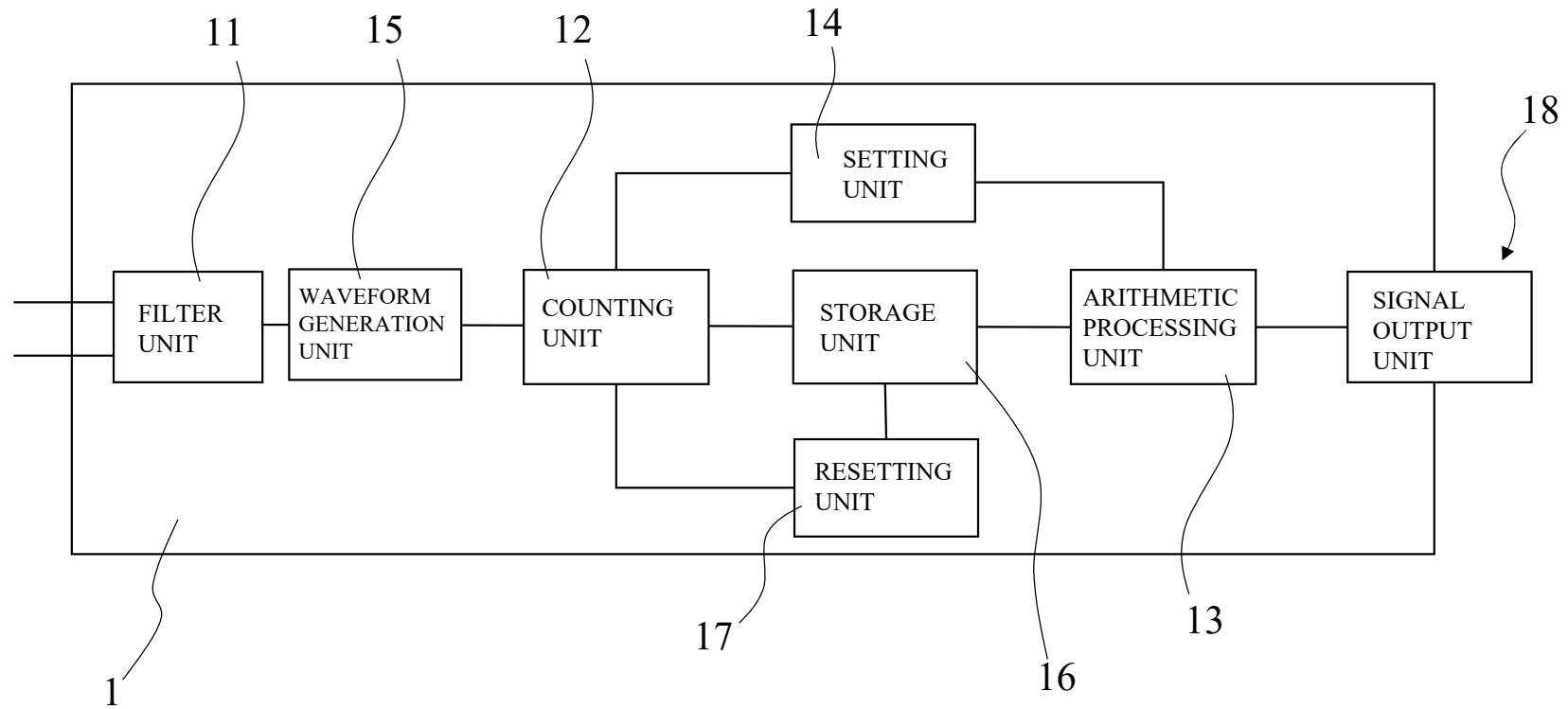


Fig. 4

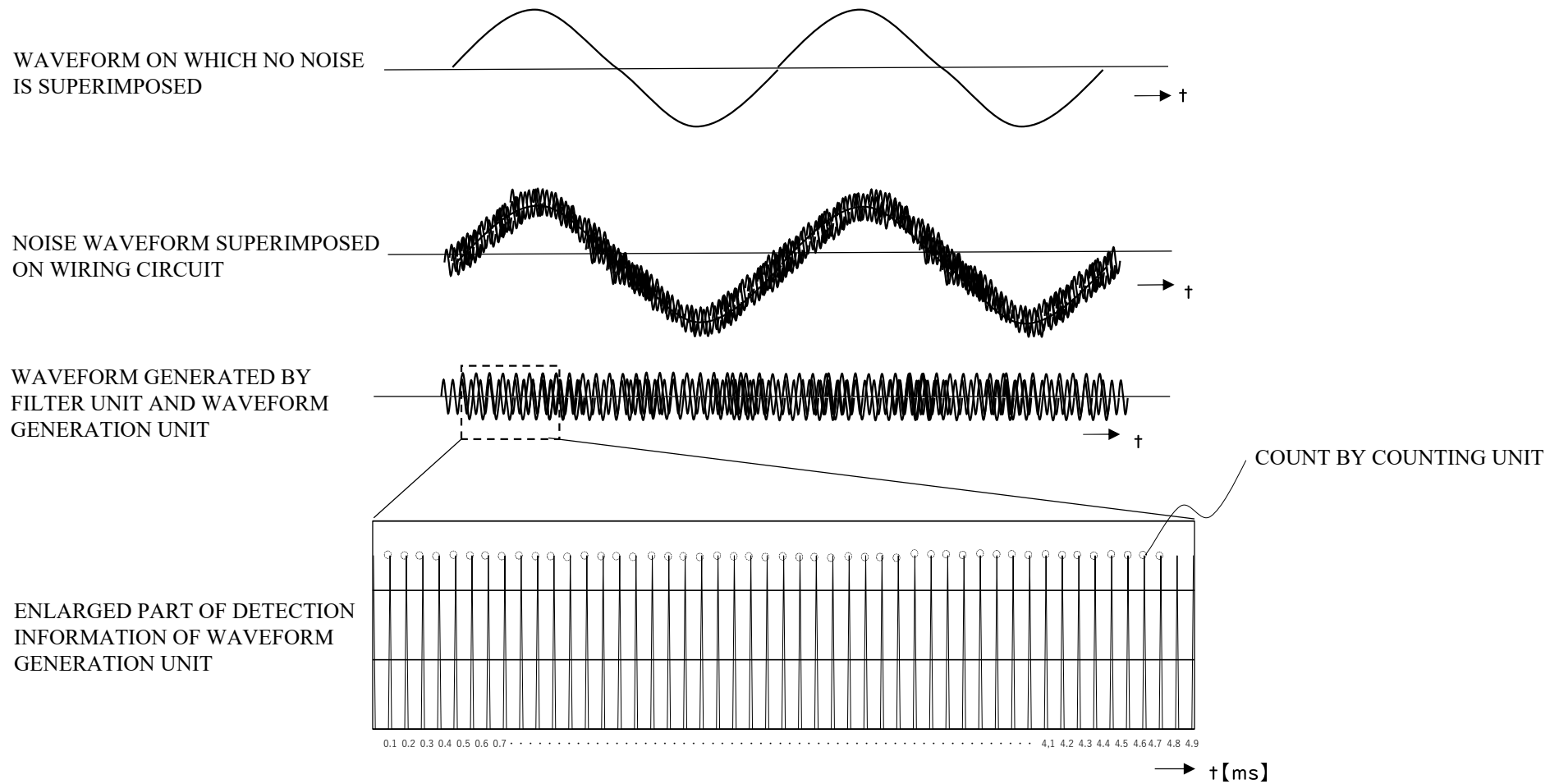
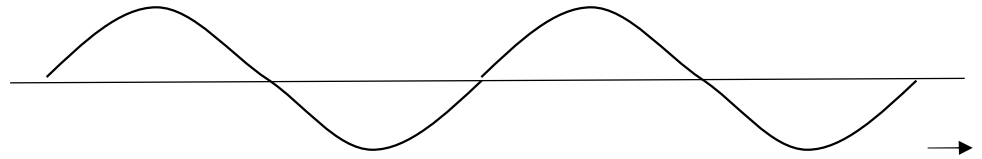
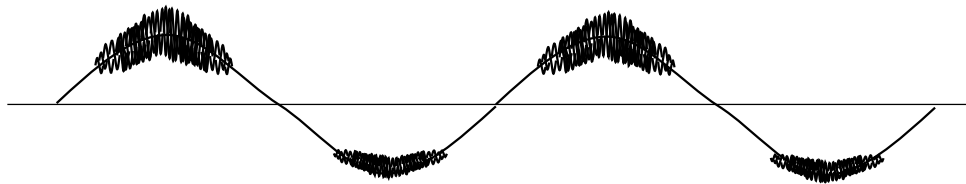


Fig. 5

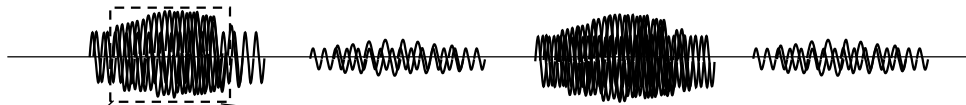
WAVEFORM ON WHICH NO NOISE IS
SUPERIMPOSED



NOISE WAVEFORM SUPERIMPOSED ON
WIRING CIRCUIT



WAVEFORM GENERATED BY FILTER
UNIT AND WAVEFORM GENERATION
UNIT



ENLARGED PART OF DETECTION
INFORMATION OF WAVEFORM
GENERATION UNIT

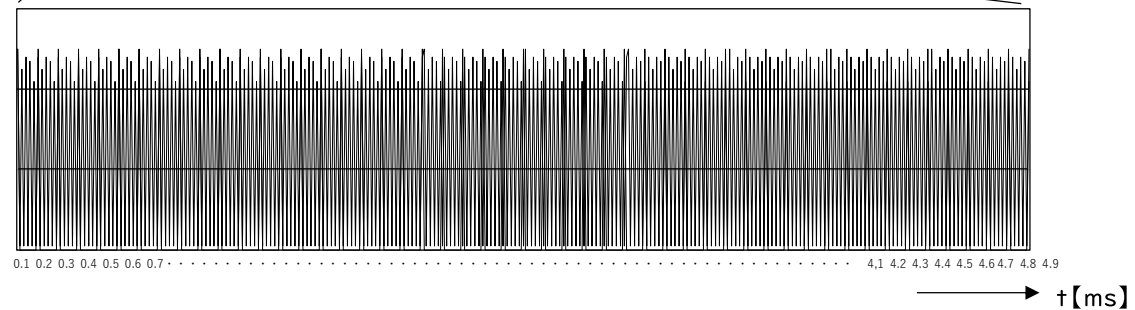
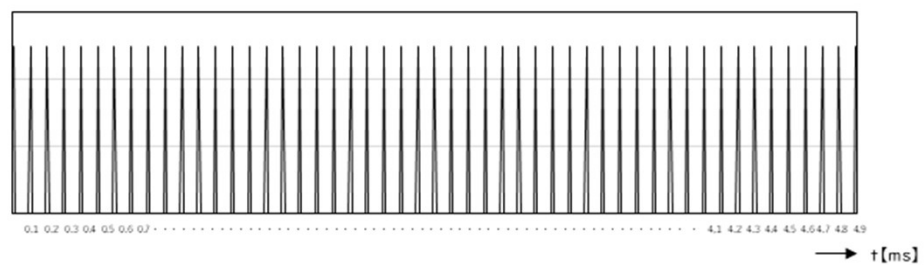


Fig.6

[DEVICE NOISE DETECTION STATE]



[DISCHARGE NOISE DETECTION STATE]

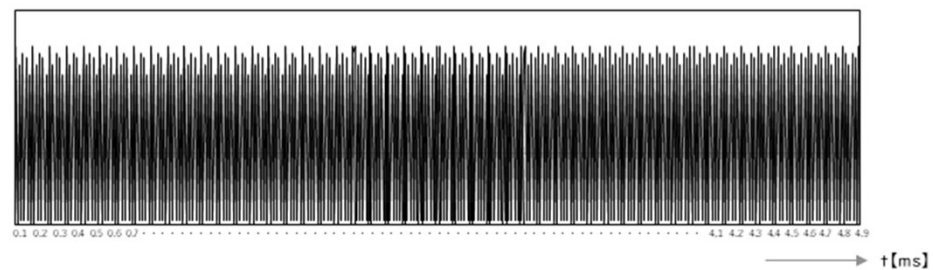
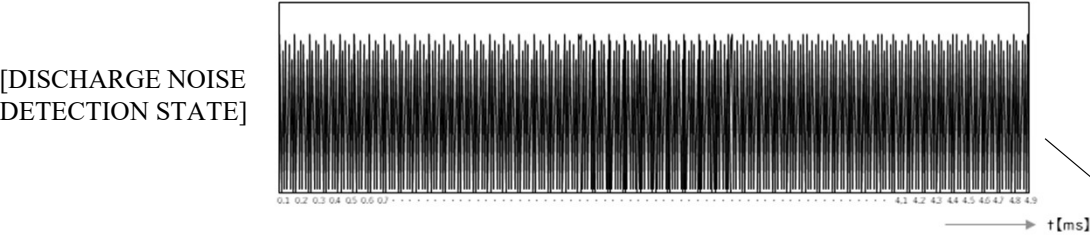
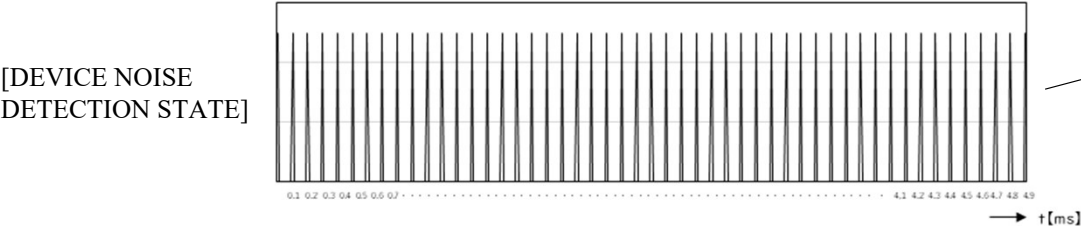


Fig. 7



COUNT TIME [ms]	OUTPUT [mV]	DETERMINATION
0.001	0	
0.002	0	
0.003	0	
0.004	0	
:	:	
0.100	5	COUNT + 1
0.101	0	
:	:	:
1.000	5	COUNT + 1

COUNT TIME [ms]	OUTPUT [mV]	DETERMINATION
0.001	5	COUNT + 1
0.002	3	COUNT + 1
0.003	2	COUNT + 1
0.004	7	COUNT + 1
:	:	
0.100	5	COUNT + 1
0.101	4	COUNT + 1
:	:	:
1.000	7	COUNT + 1

Fig. 8

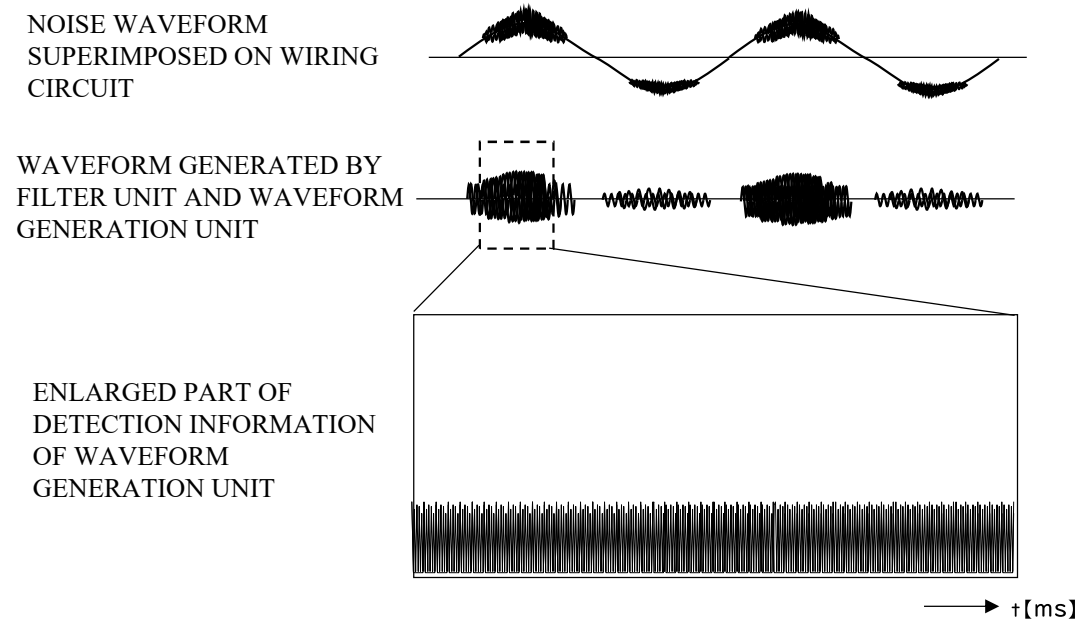


Fig. 9

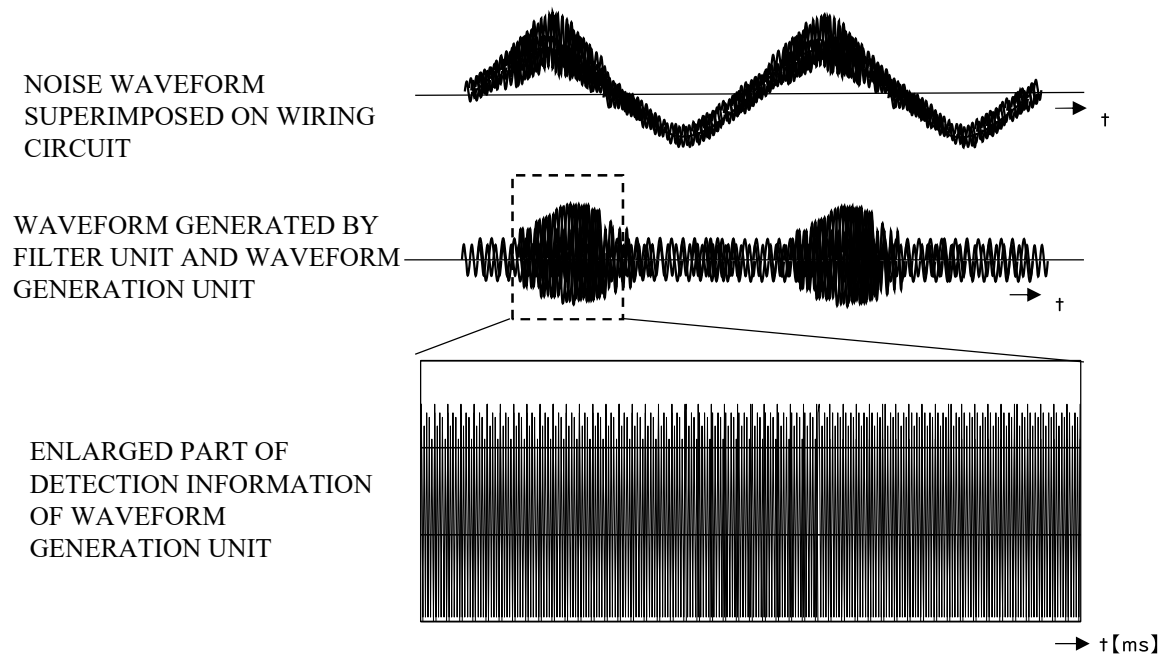
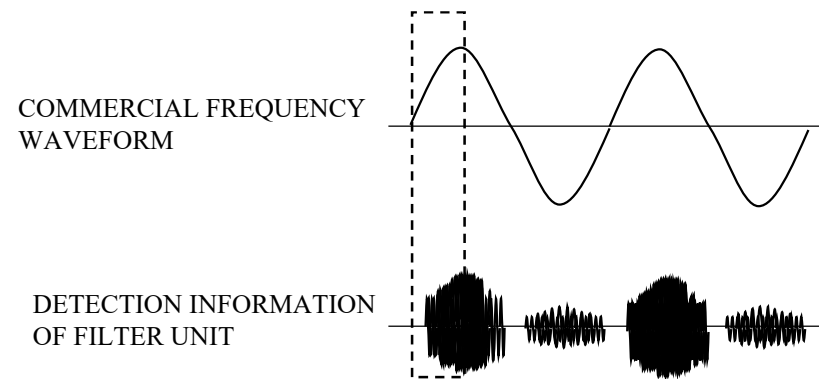
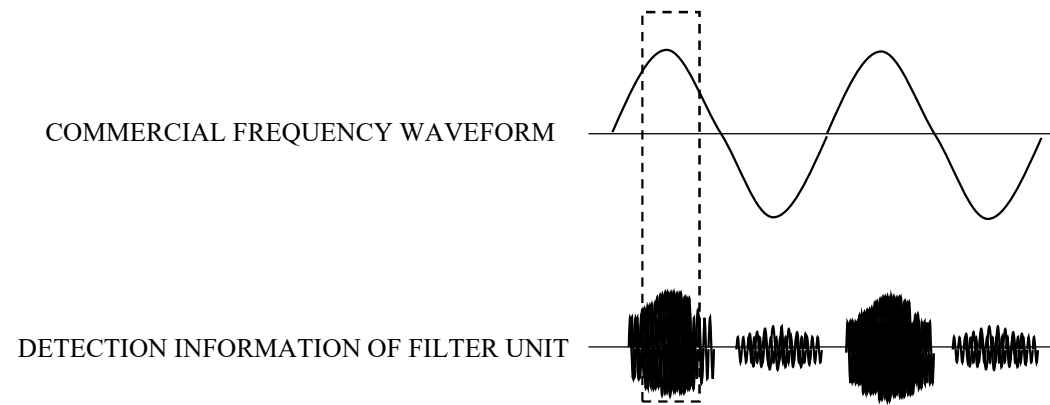


Fig. 10



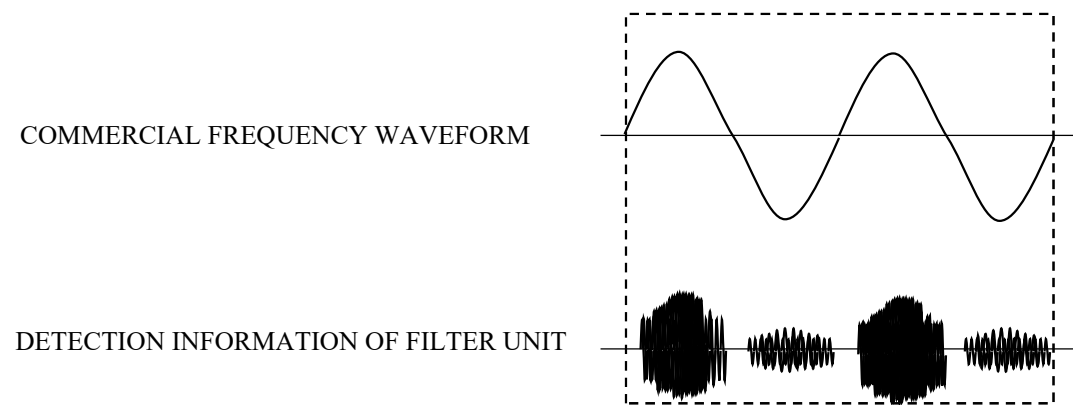
[DETERMINATION BASED ON NUMBER OF TIMES DETECTED DURING 1/4 OF ONE CYCLE TIME]

Fig. 11



[DETERMINATION BASED ON NUMBER OF TIMES DETECTED DURING TIME BEFORE AND AFTER PEAK TIME DOMAIN]

Fig. 12



[DETERMINATION BASED ON NUMBER OF TIMES DETECTED DURING TWO-CYCLE TIME]

Fig. 13

SINCE NUMBER OF TIMES DETECTED EXCEEDS PREDETERMINED VALUE PLURALITY OF CONSECUTIVE TIMES, IT IS DETERMINED AS DISCHARGE NOISE

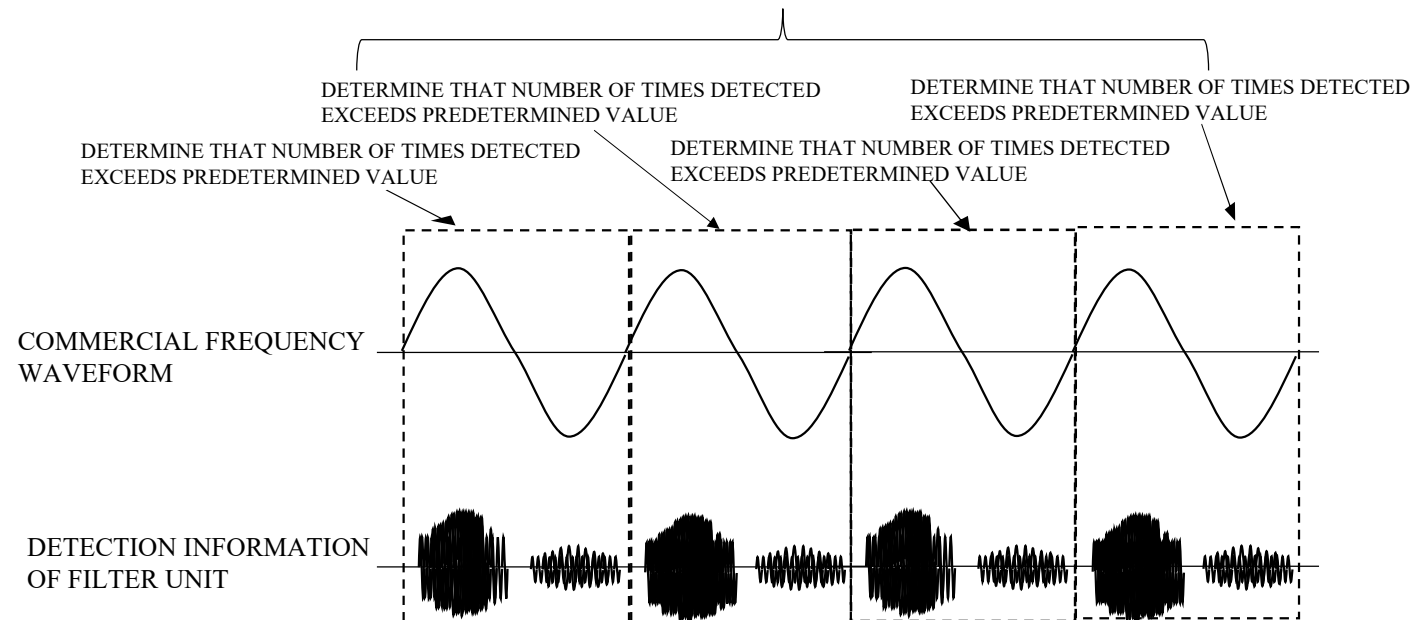


Fig. 14

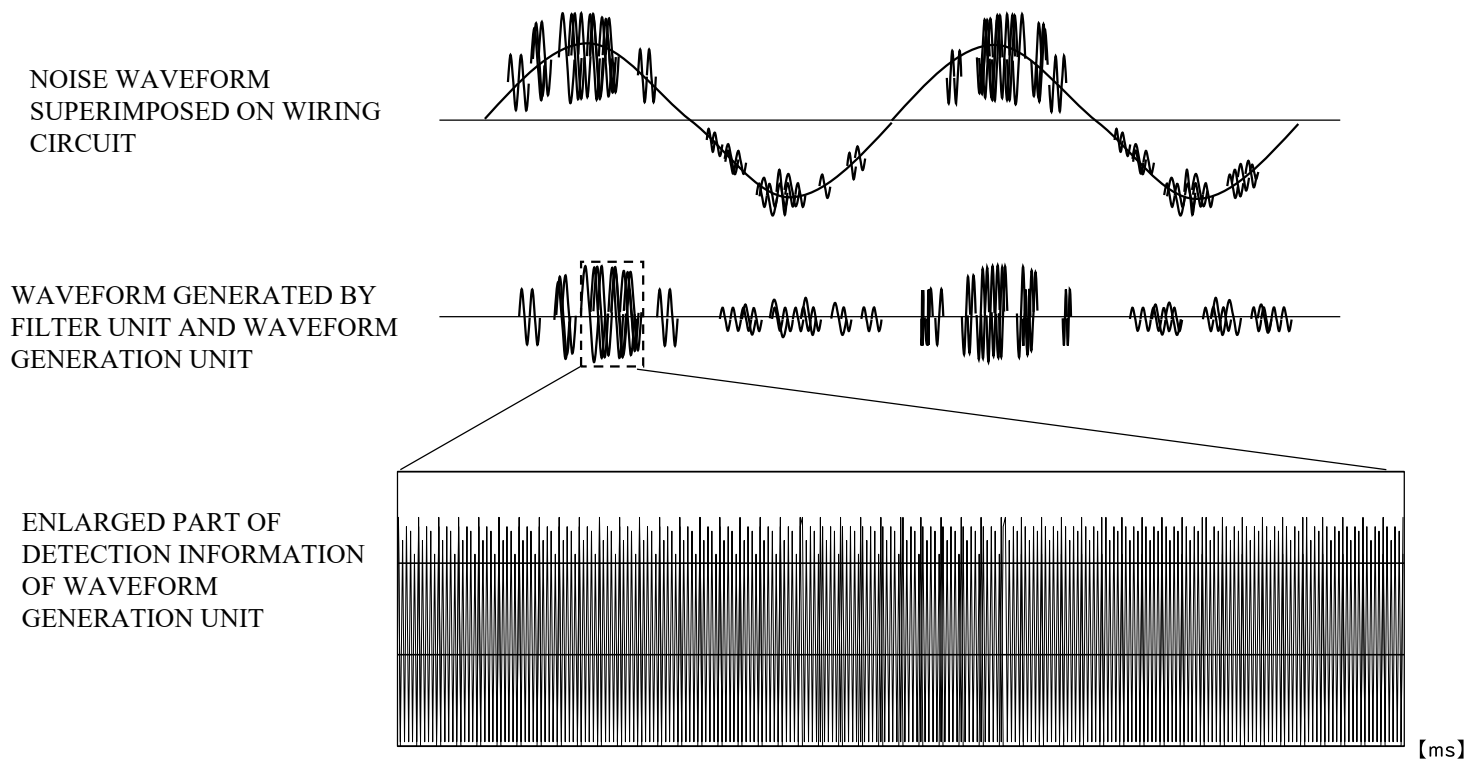


Fig. 15

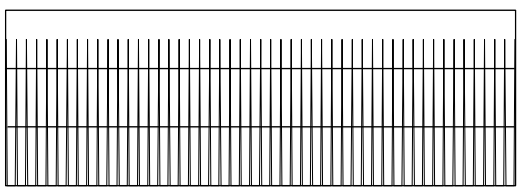
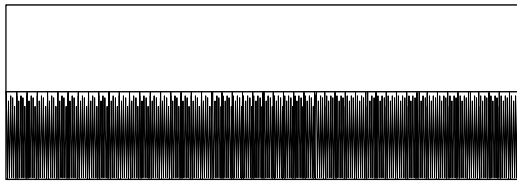
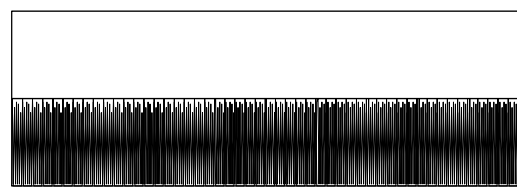
	OUTPUT WAVEFORM DURING ONE TO TWO CYCLES OF COMMERCIAL FREQUENCY (LONG PERIOD)	PARTIALLY ENLARGED OUTPUT WAVEFORM OF WAVEFORM (SHORT PERIOD)	DETERMINATION CONDITIONS
DEVICE NOISE			LONG PERIOD => NOISE IS CONTINUOUSLY OUTPUT SHORT PERIOD => NUMBER OF TIMES DETECTED IS SMALL
DISCHARGE NOISE (INTER-ELECTRODE SHORT CIRCUIT)			LONG PERIOD => NOISE IS OUTPUT IN PEAK TIME DOMAIN SHORT PERIOD => NUMBER OF TIMES DETECTED IS LARGE
DISCHARGE NOISE (DISCONNECTION AND PARTIAL DISCONNECTION)			LONG PERIOD => NOISE IS OUTPUT IRREGULARLY SHORT PERIOD => NUMBER OF TIMES DETECTED IS LARGE

Fig. 16

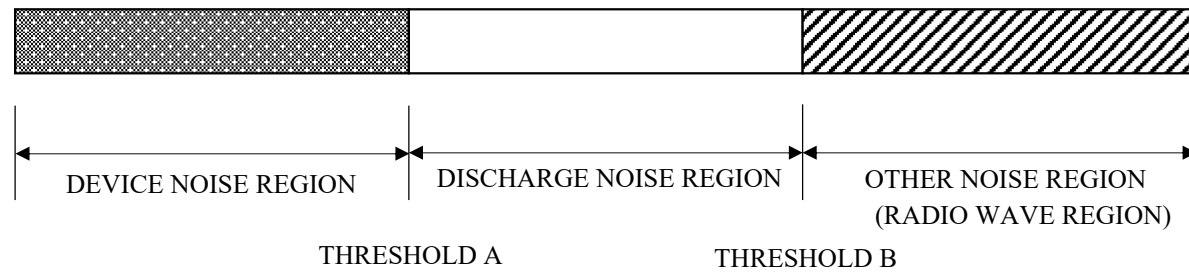


Fig. 17

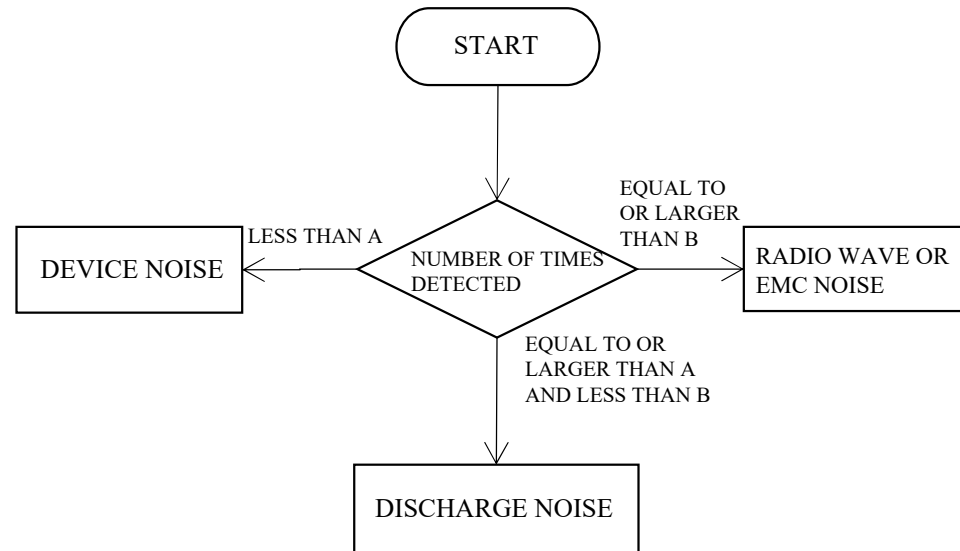


Fig. 18

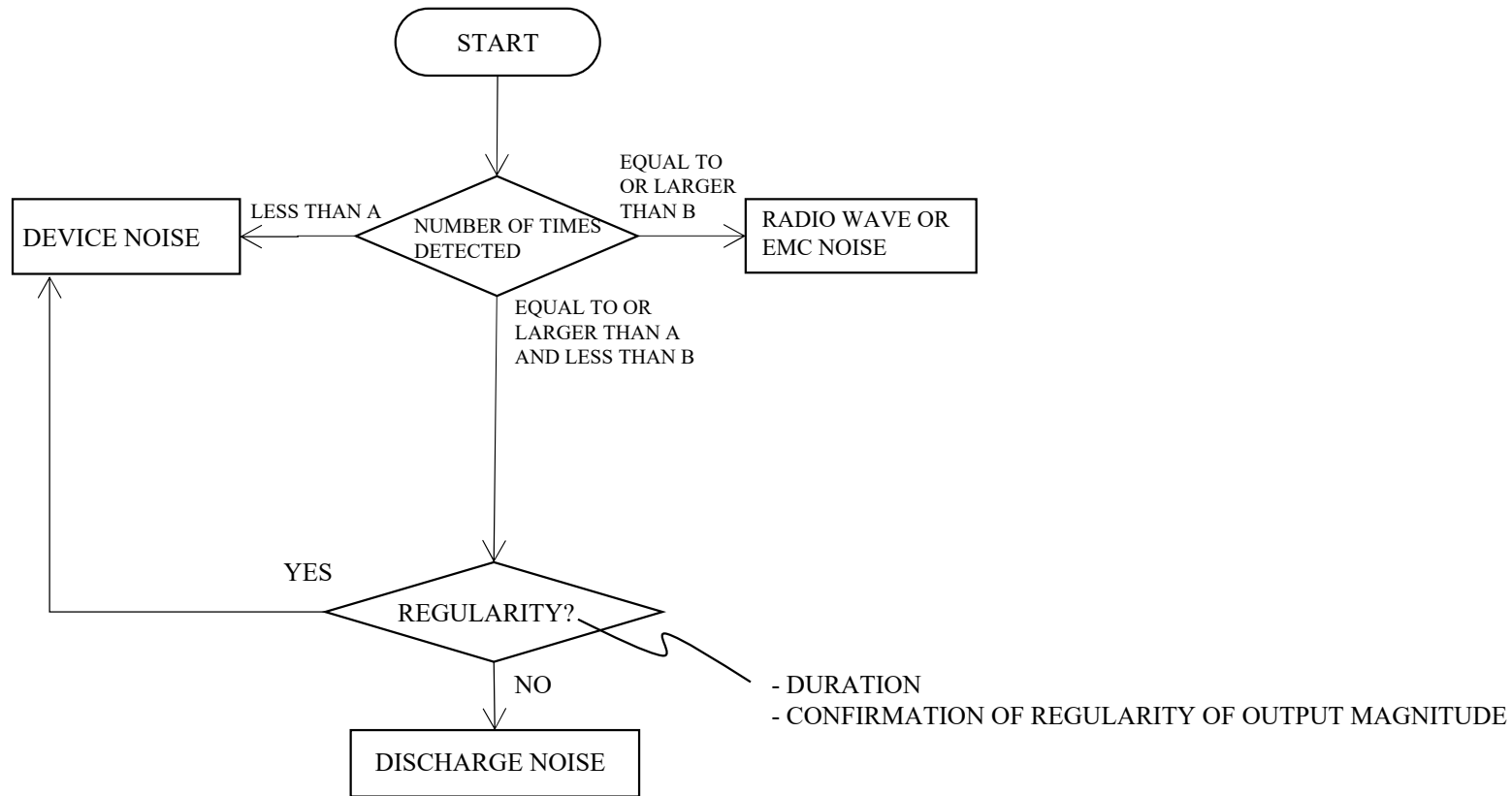


Fig. 19

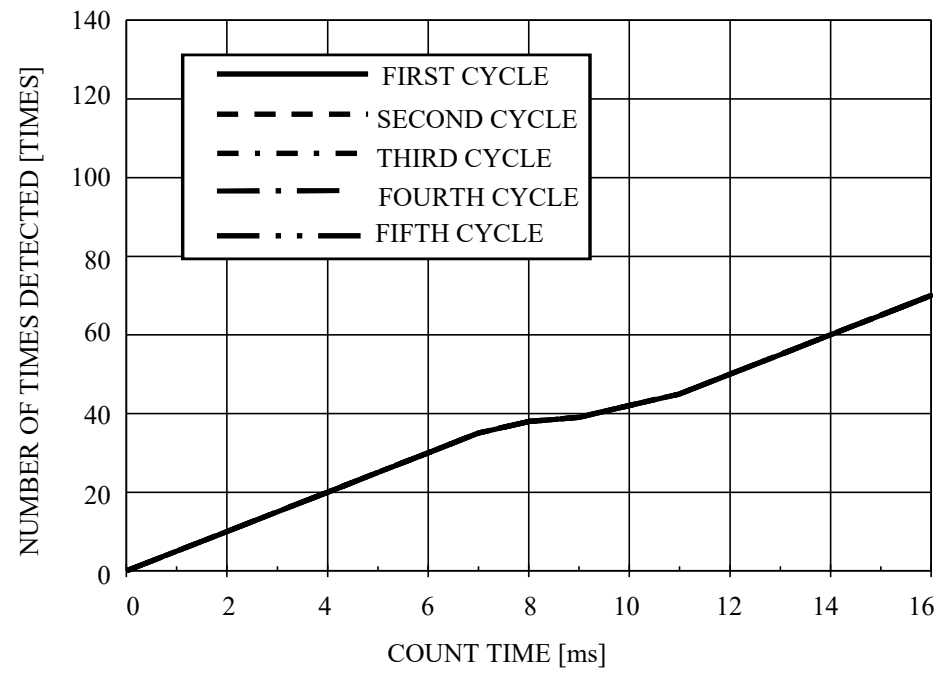


Fig. 20

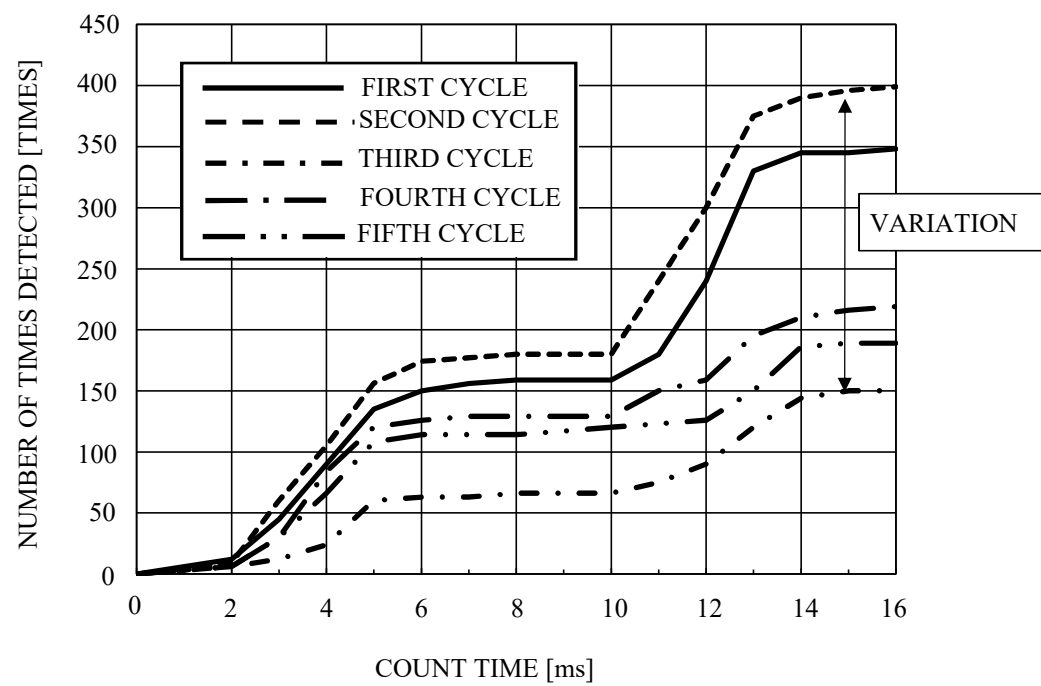


Fig. 21

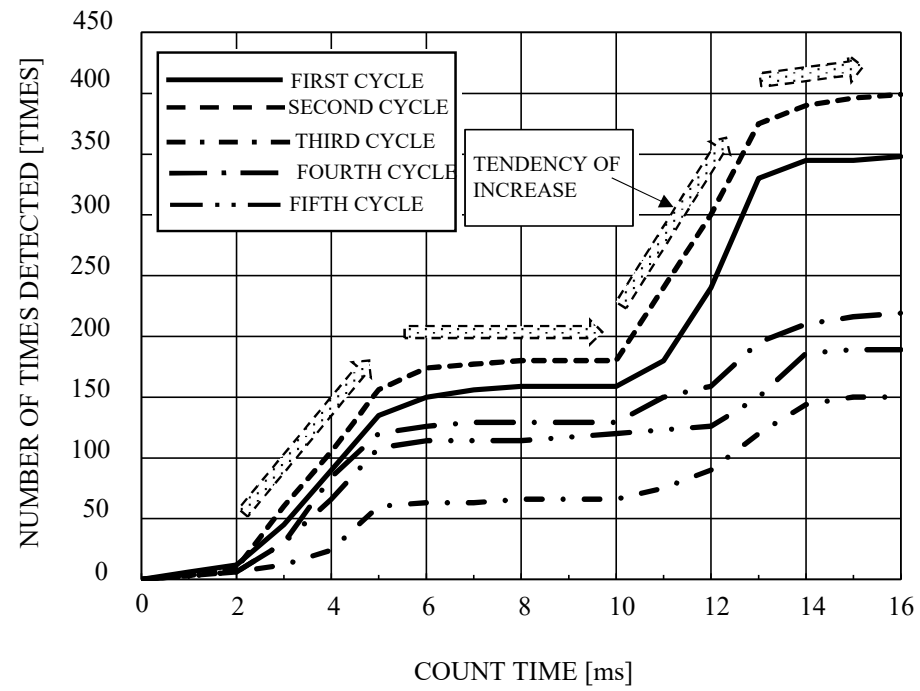


Fig. 22

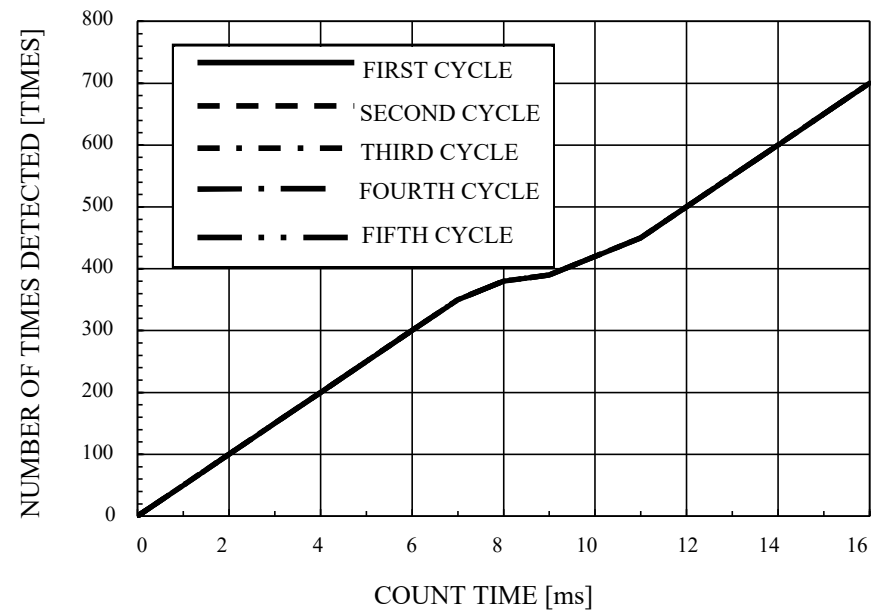


Fig. 23

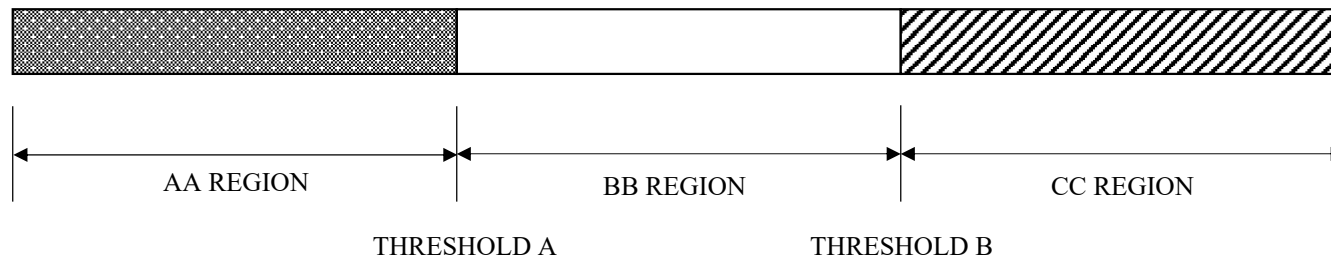


Fig. 24

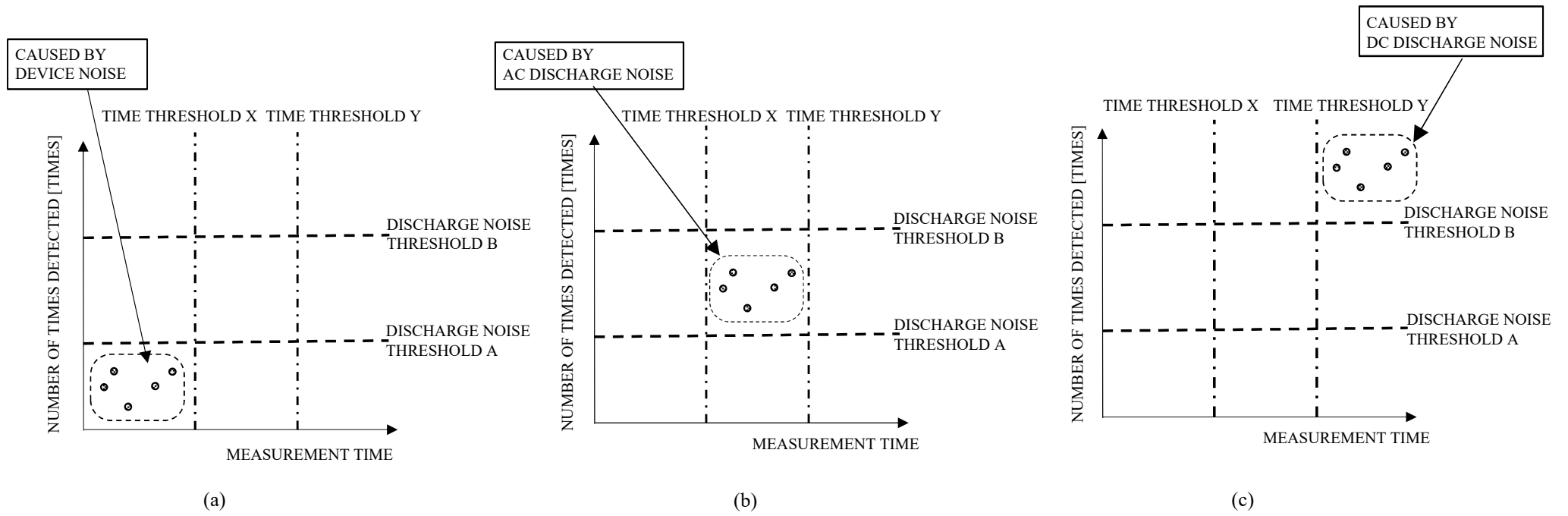


Fig. 25

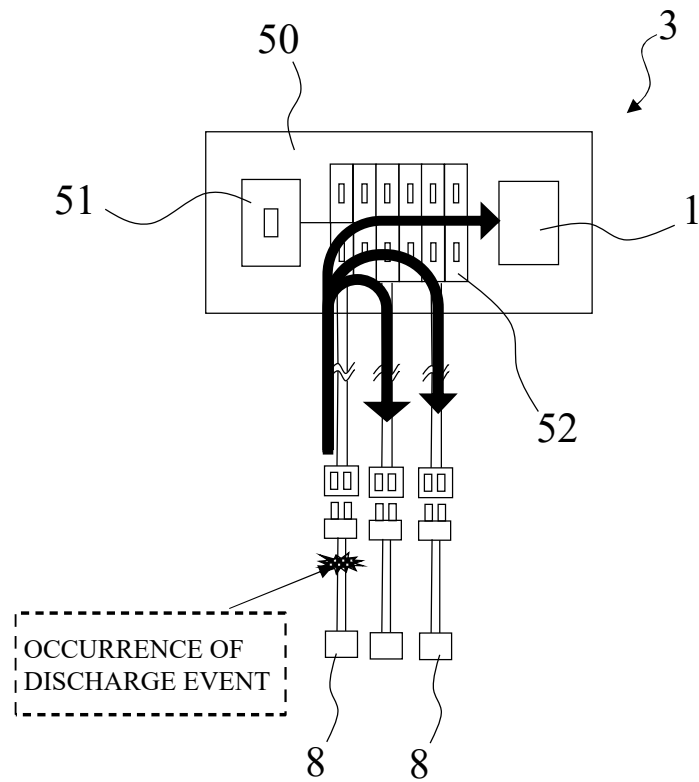


Fig. 26

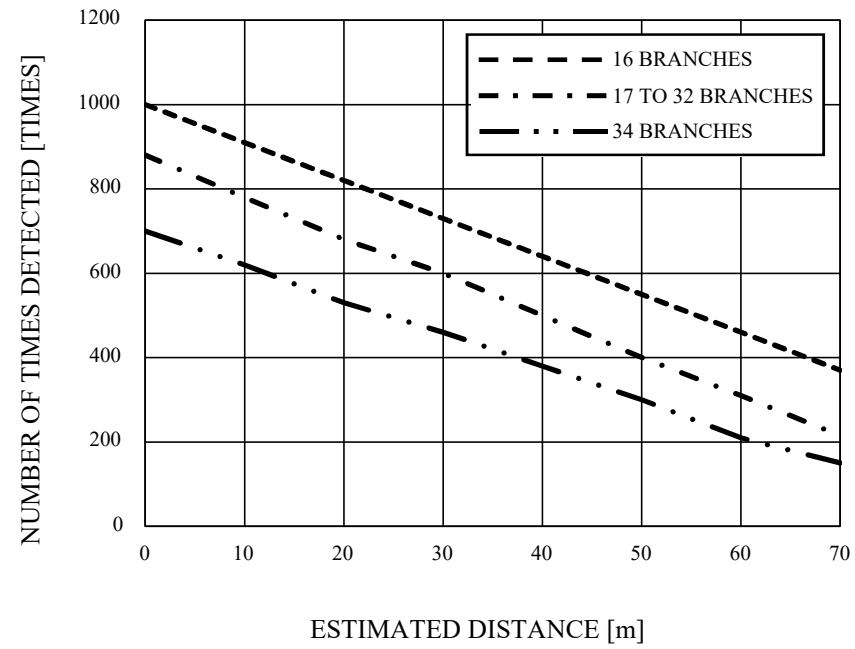


Fig. 27

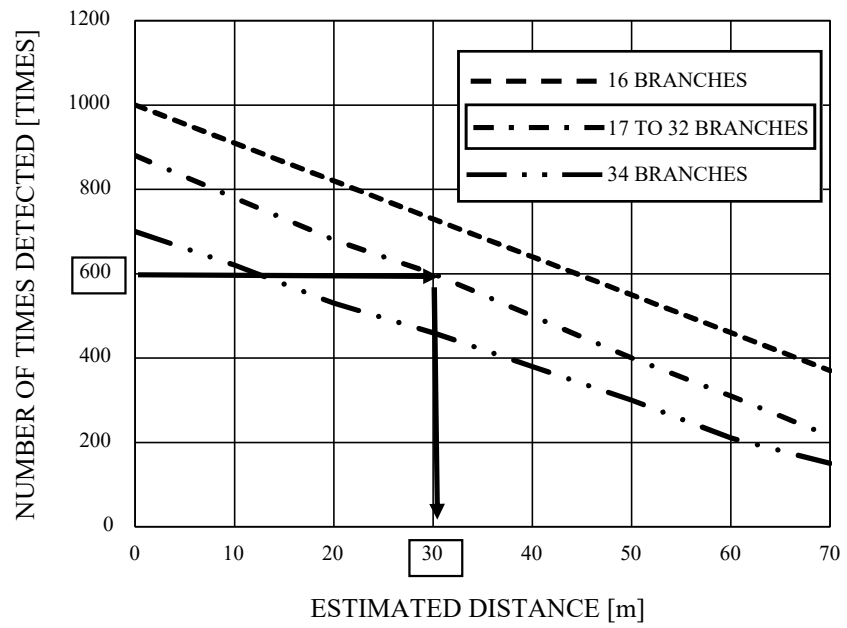


Fig. 28

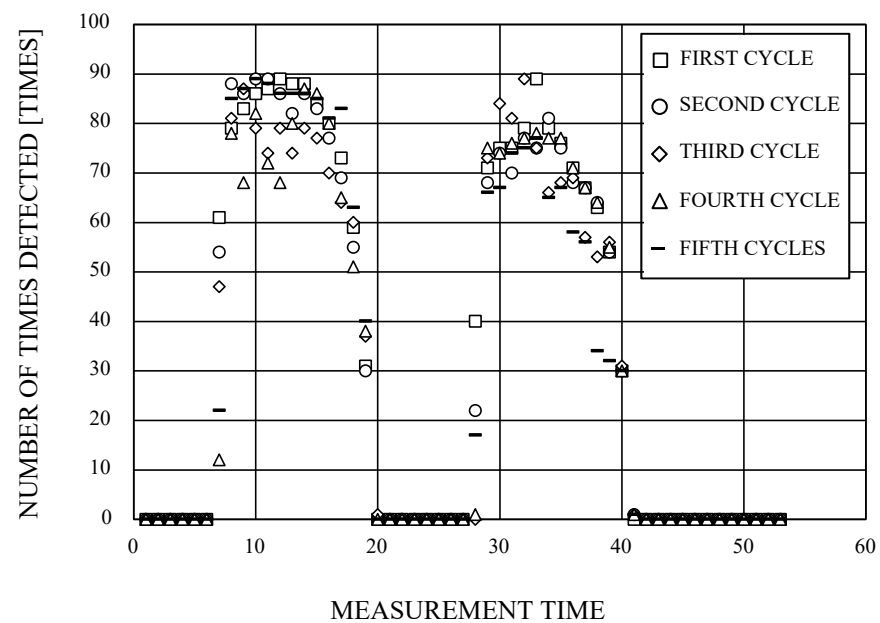


Fig. 29

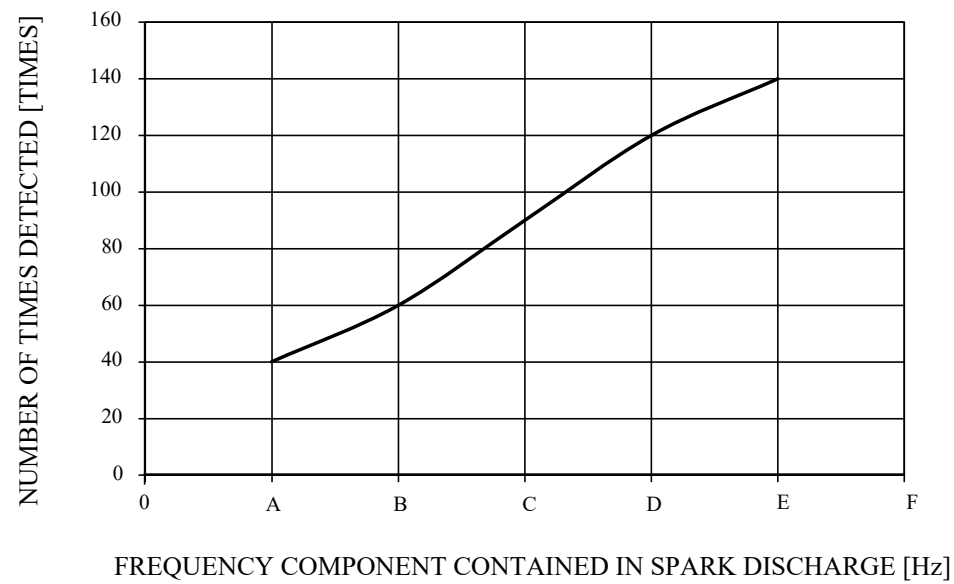


Fig. 30

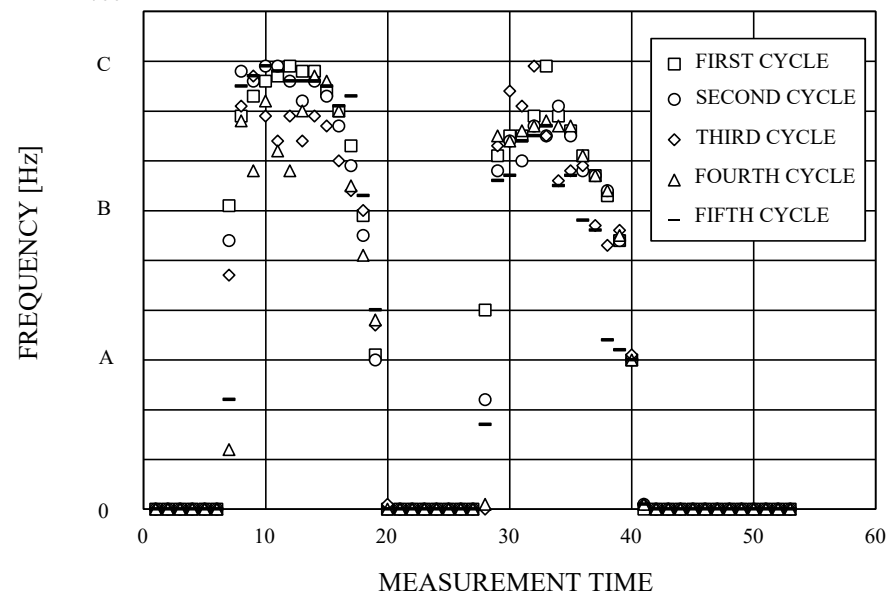


Fig. 31

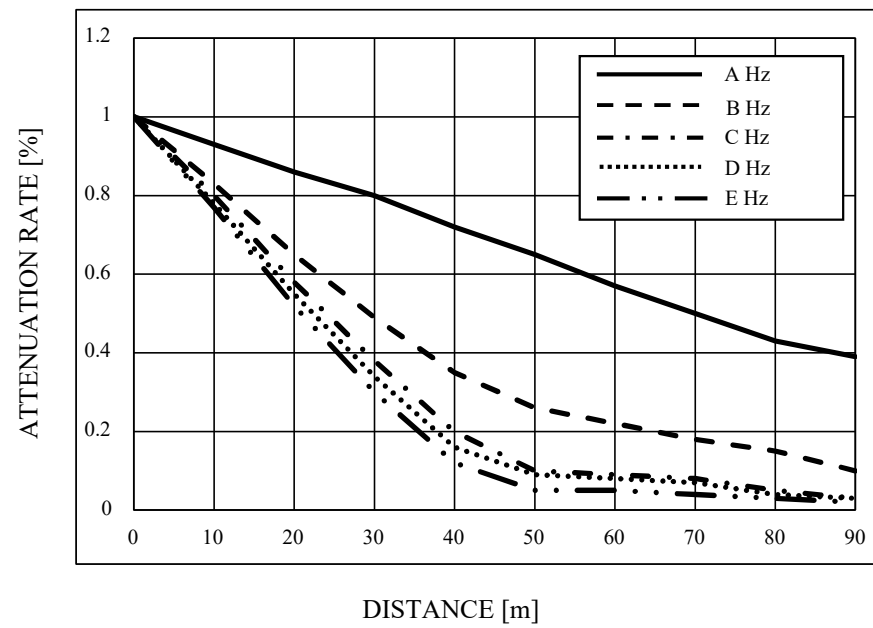


Fig. 32

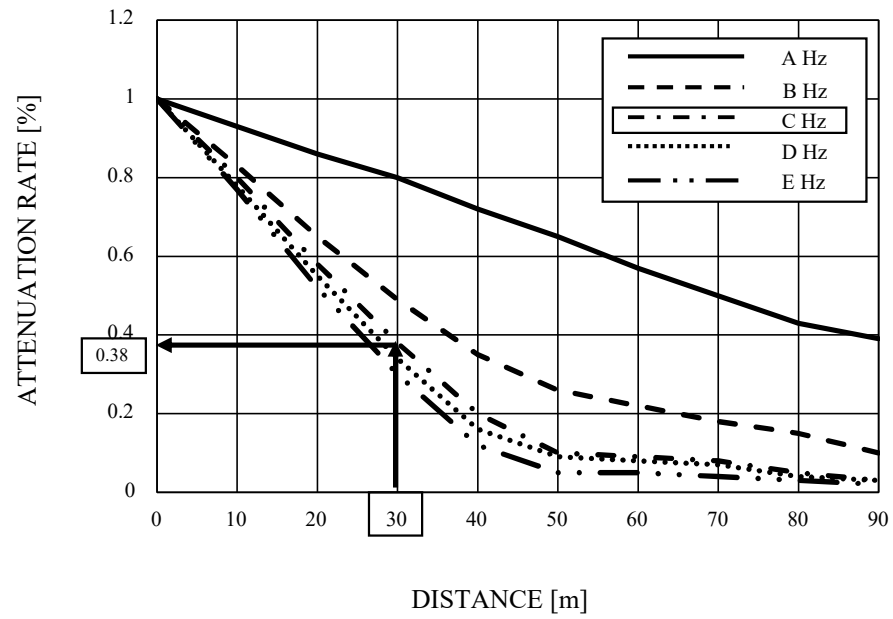


Fig. 33

