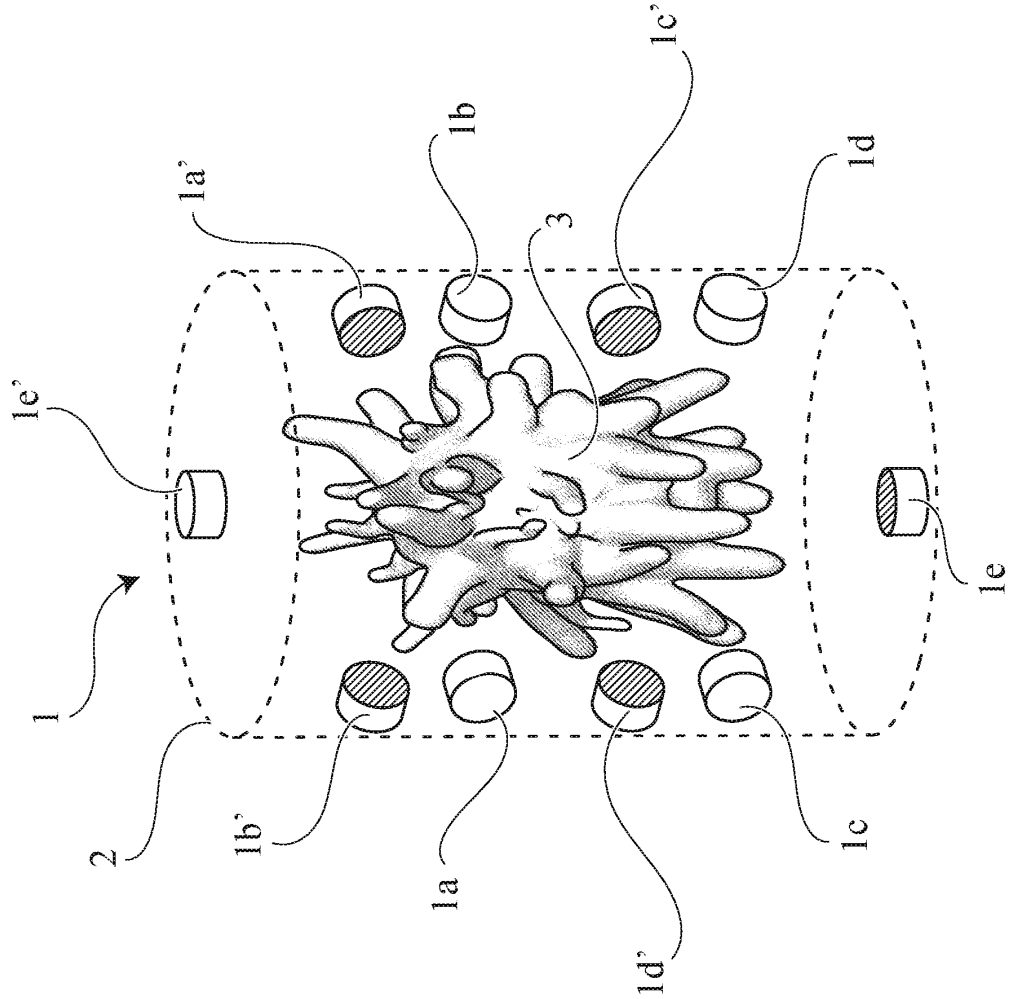


FIG. 1

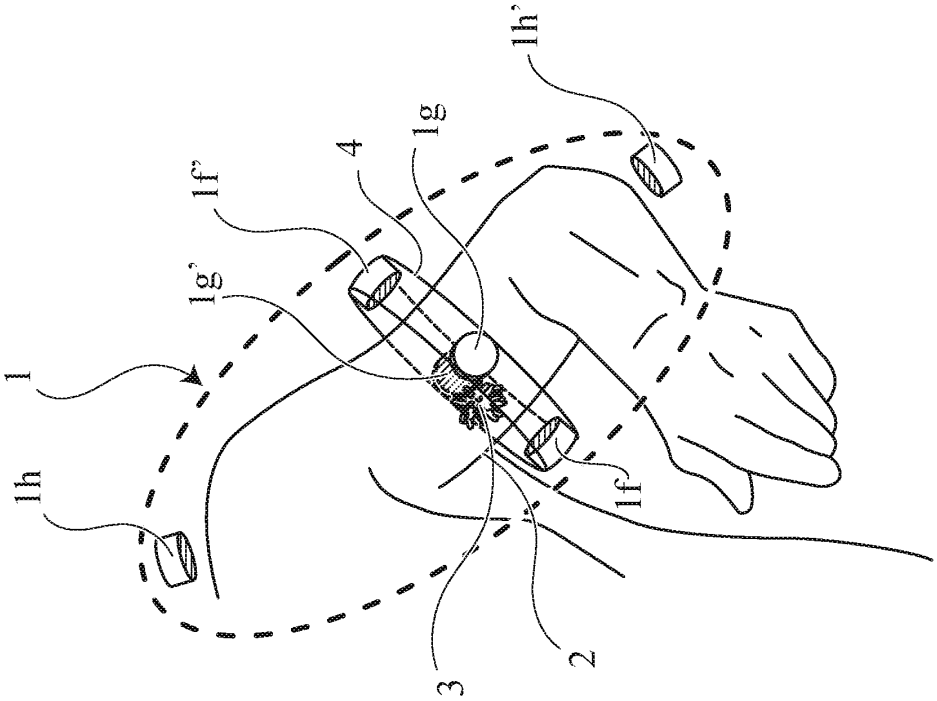


FIG. 2B

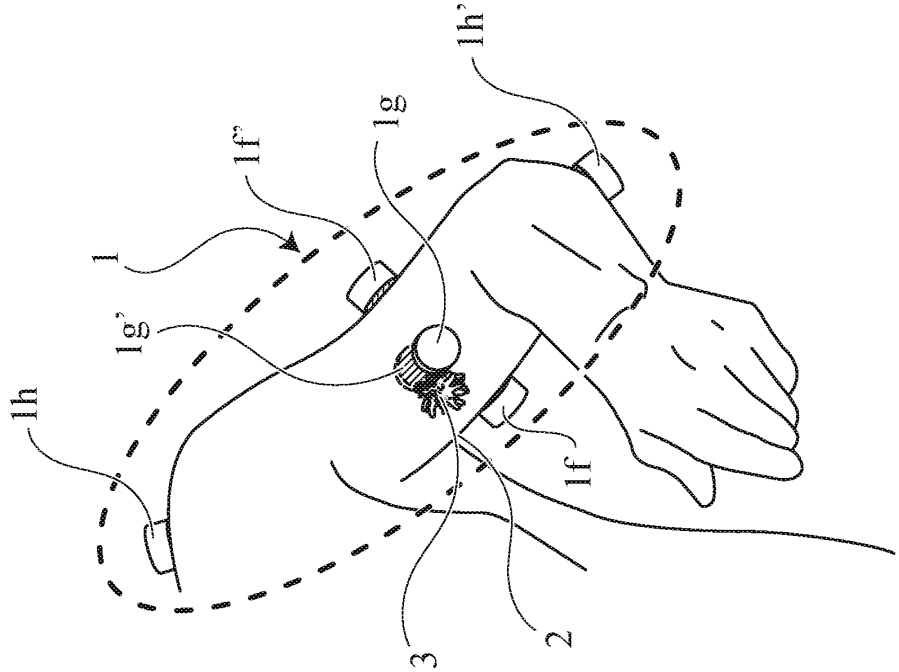


FIG. 2A

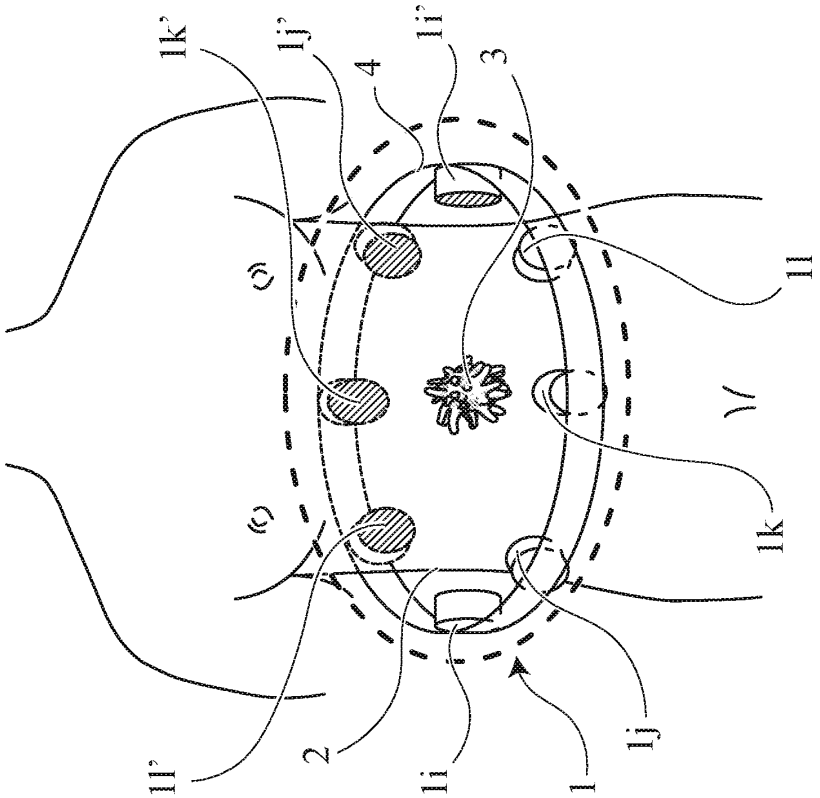


FIG. 3B

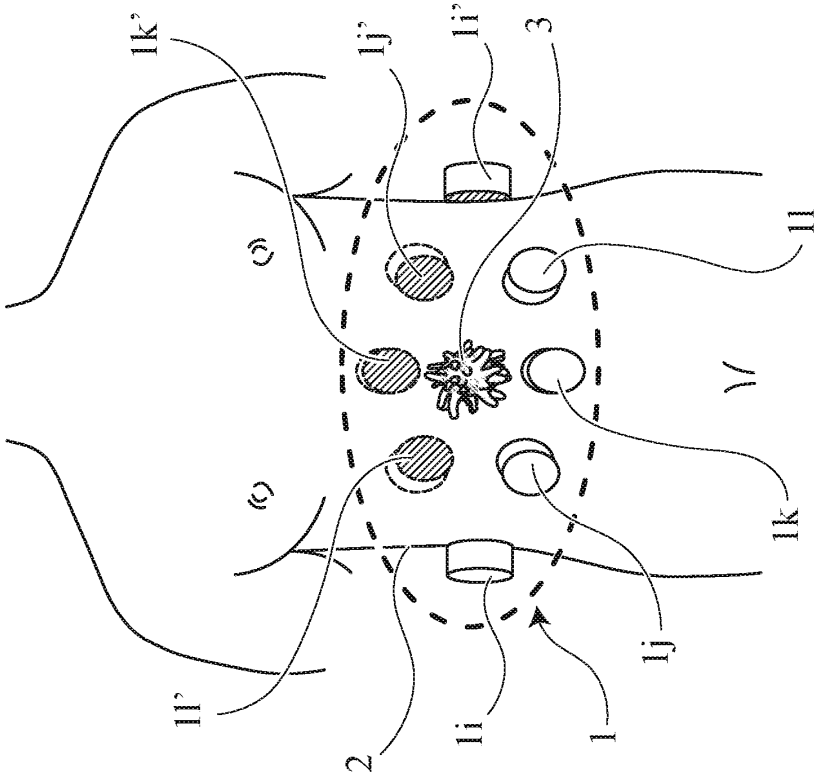


FIG. 3A

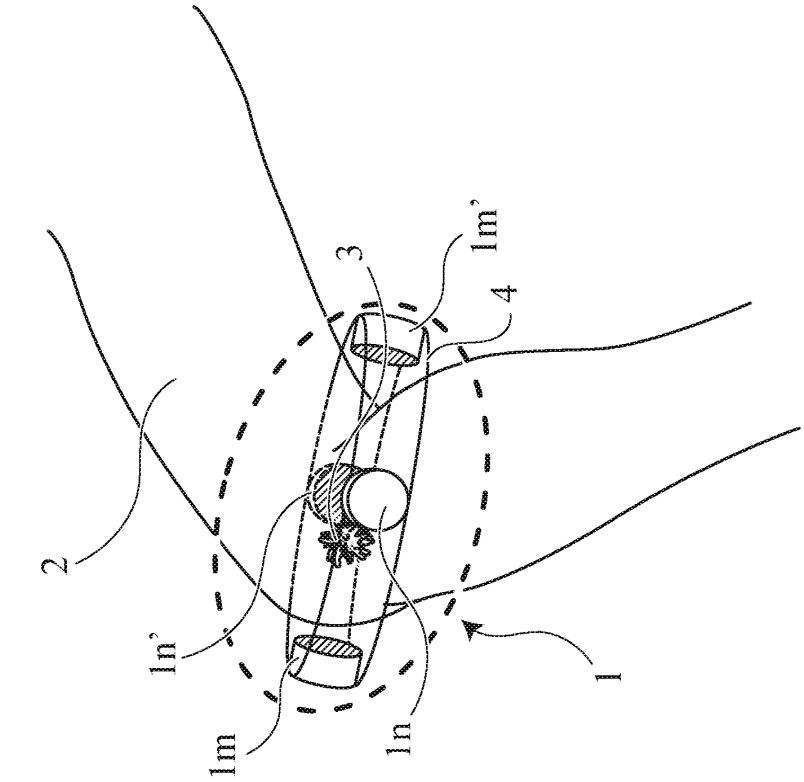


FIG. 4B

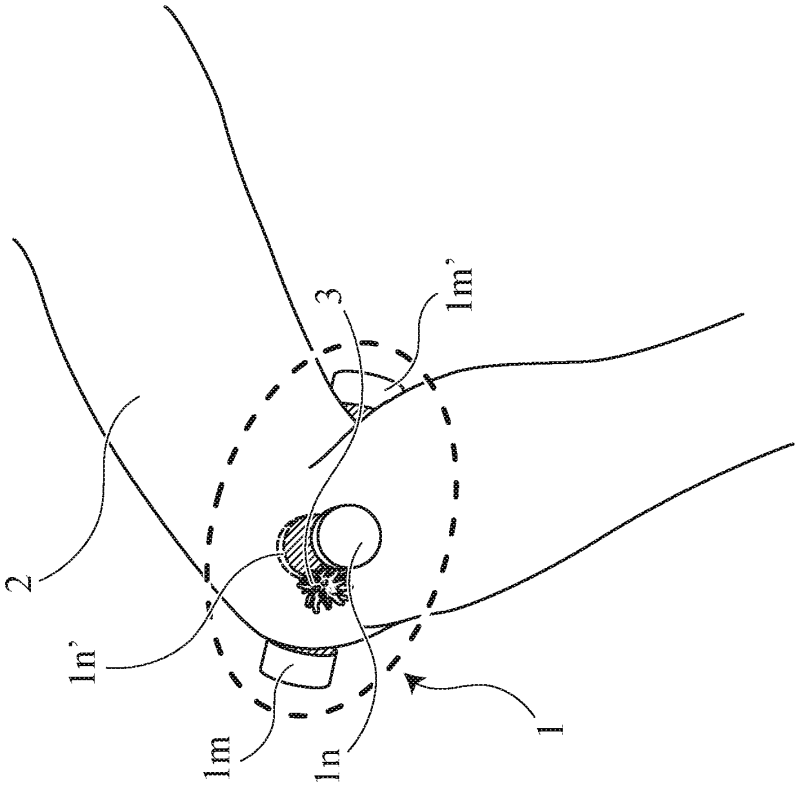


FIG. 4A

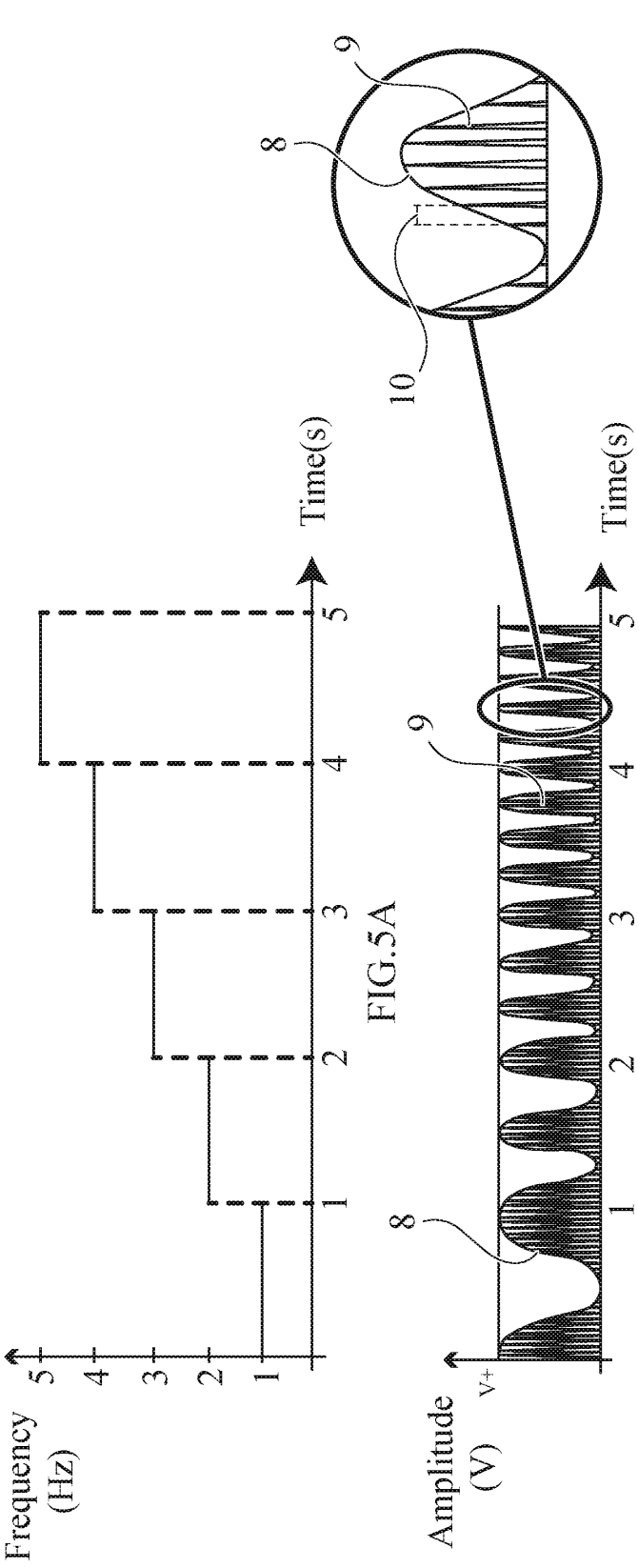


FIG.5A

FIG.5B

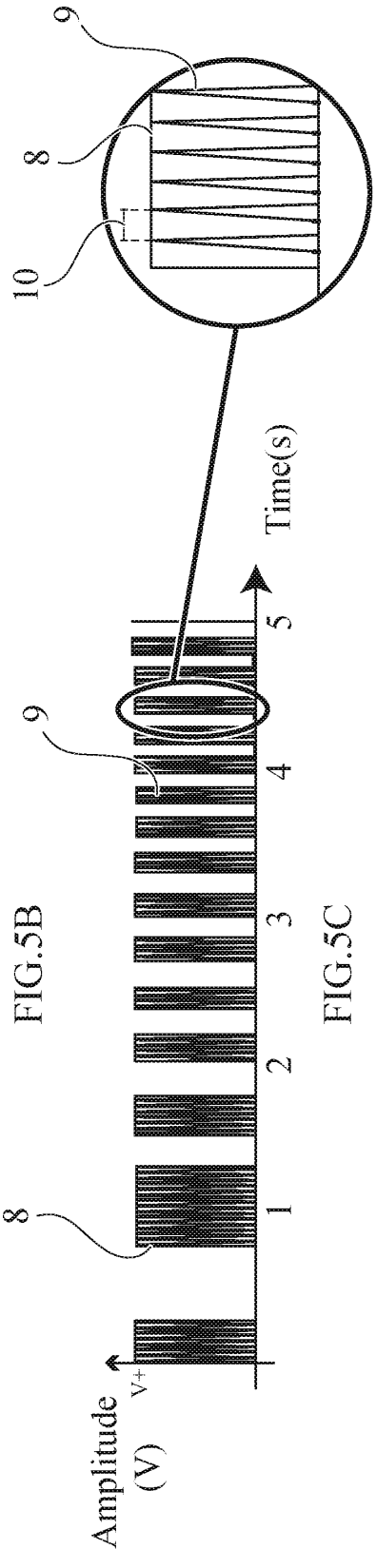


FIG.5C

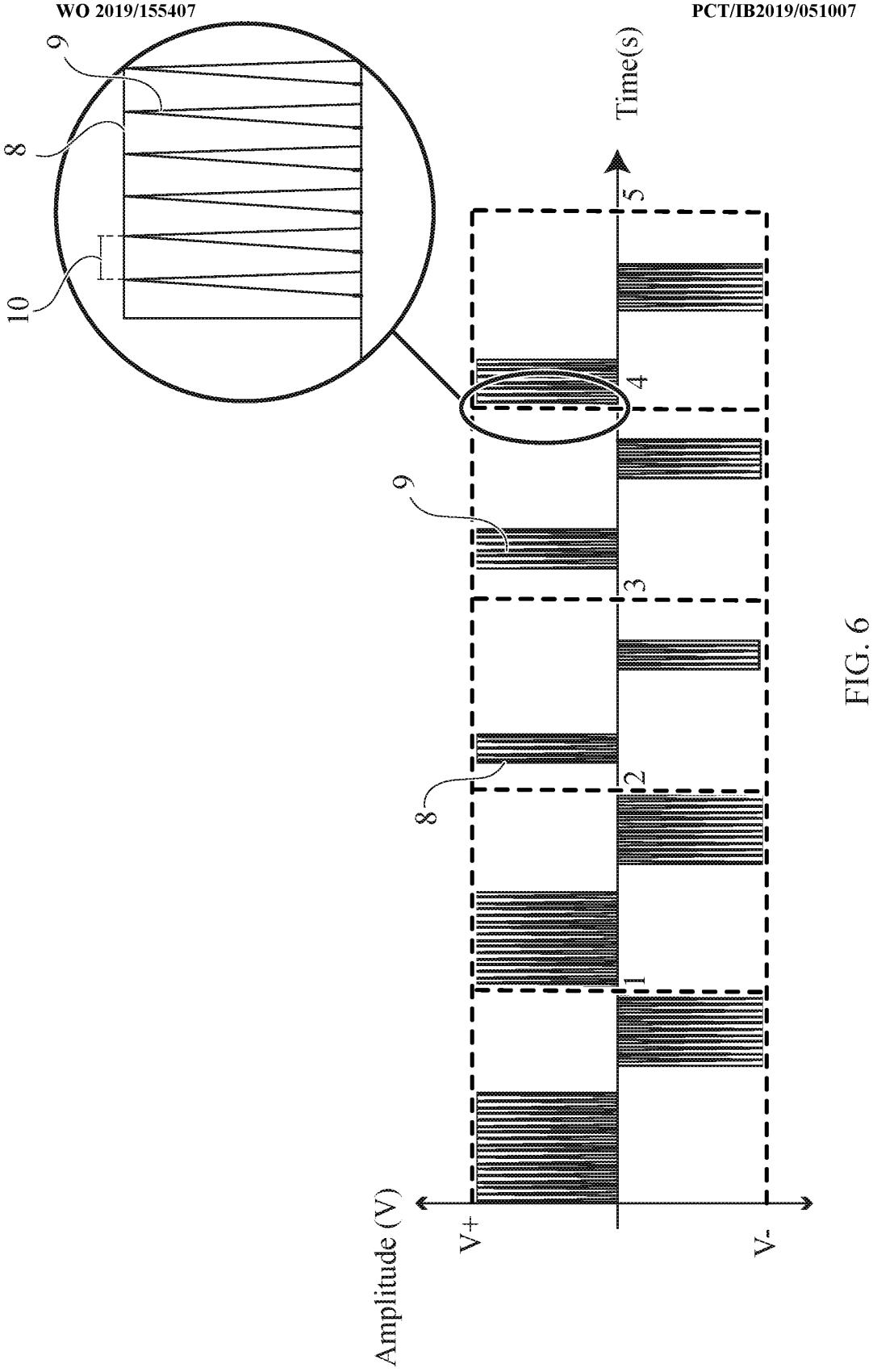


FIG. 6

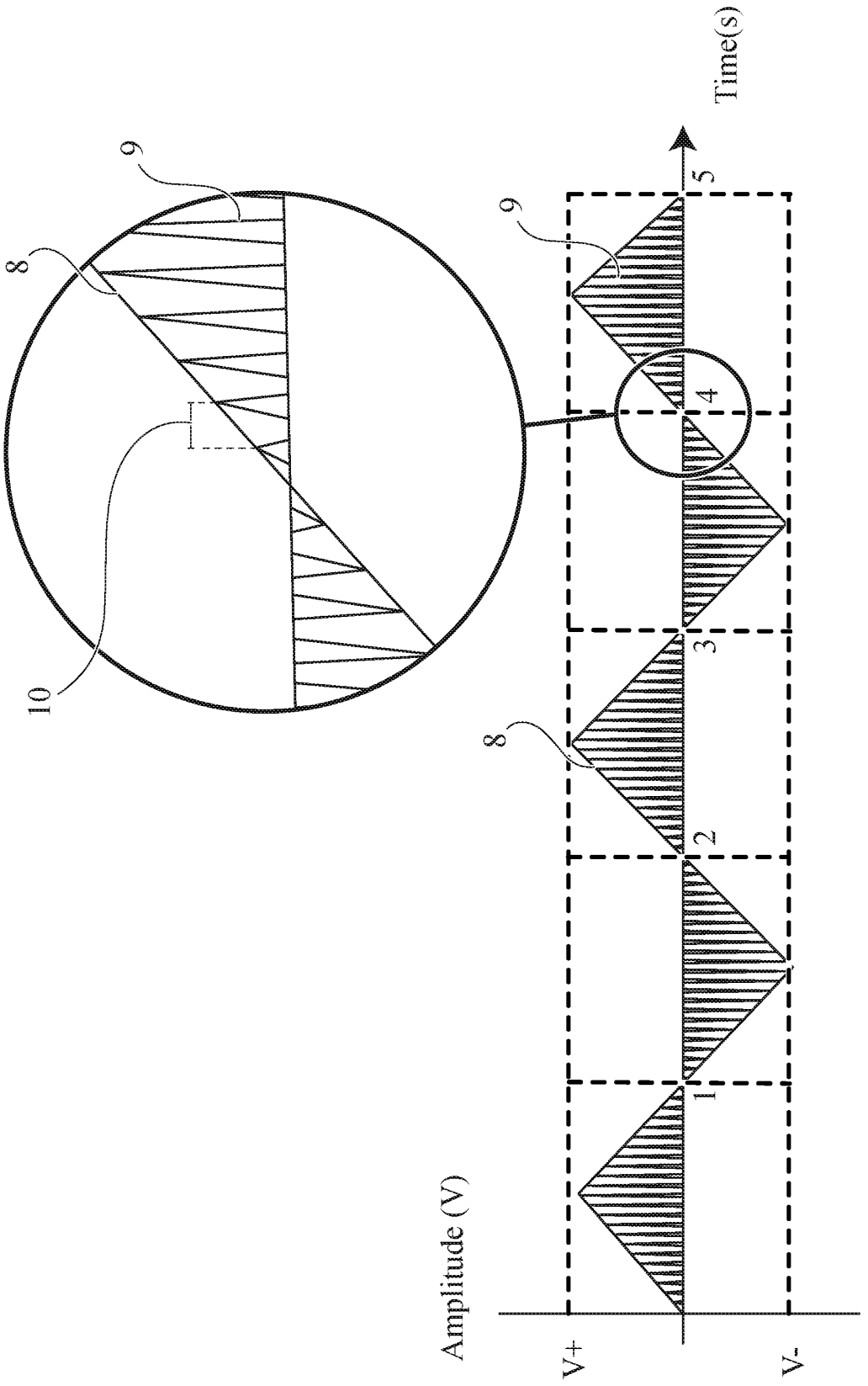


FIG. 7

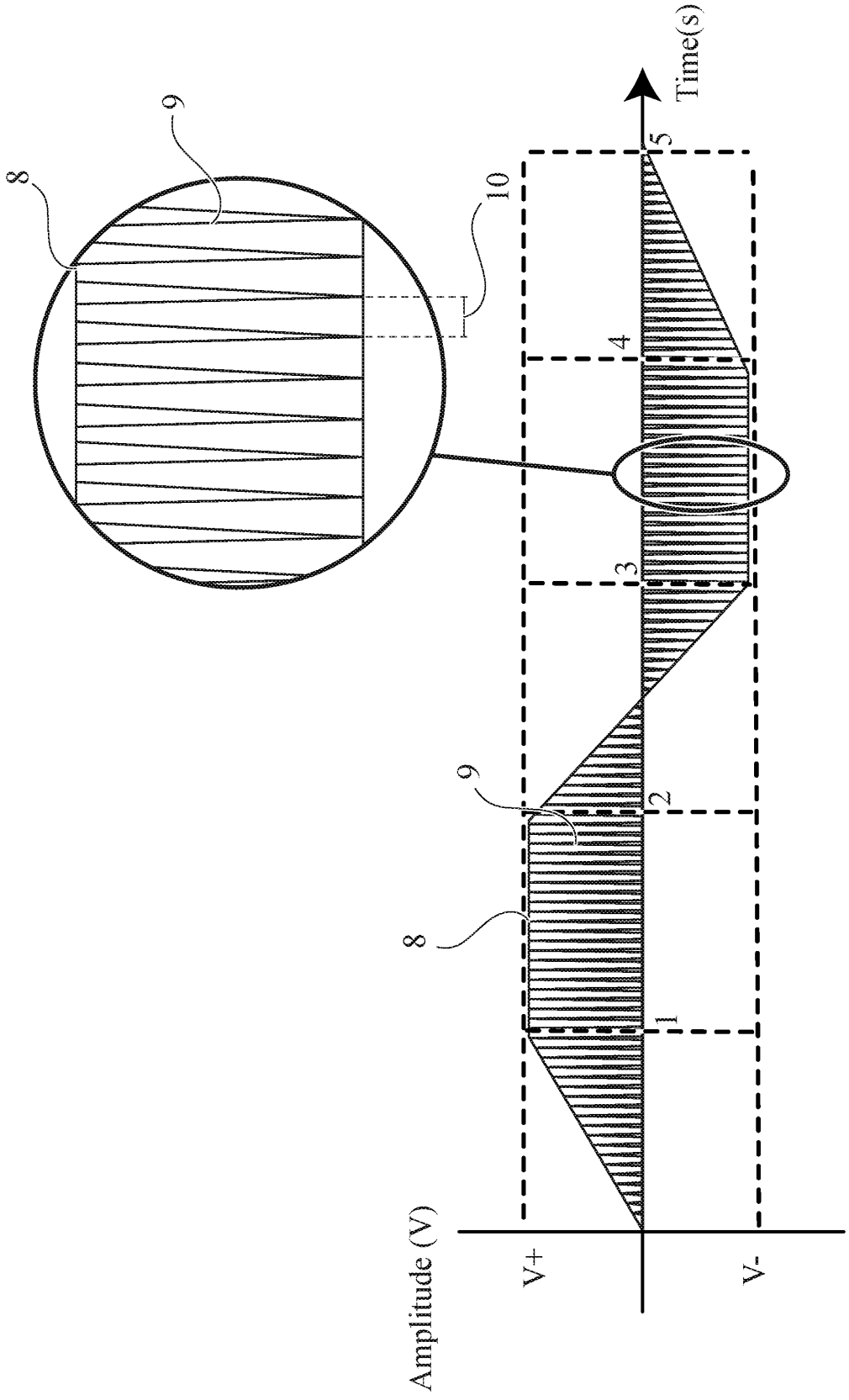


FIG. 8

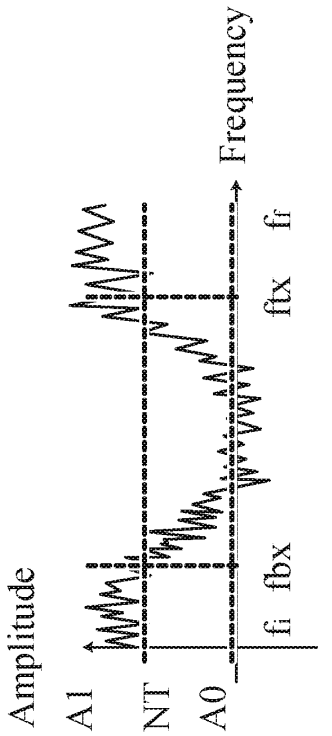


FIG. 9A

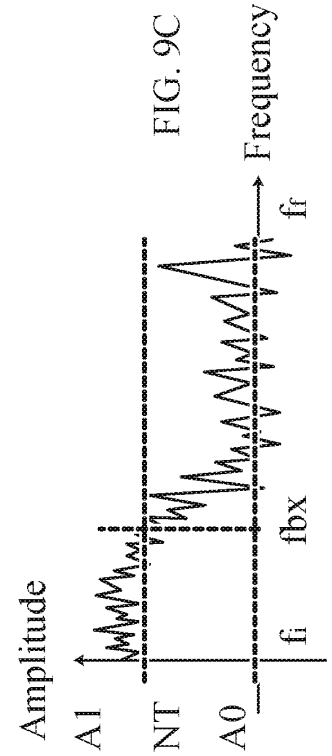


FIG. 9C

FIG. 9B

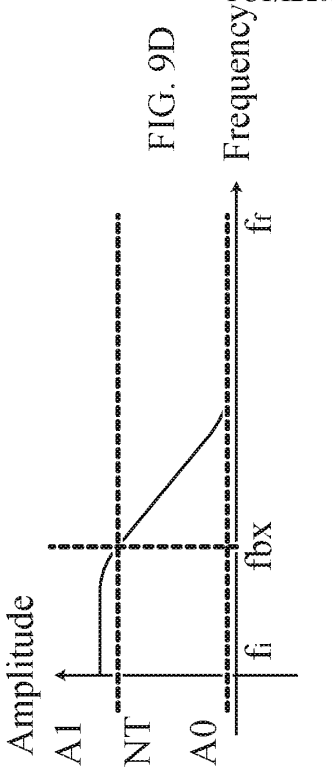


FIG. 9D

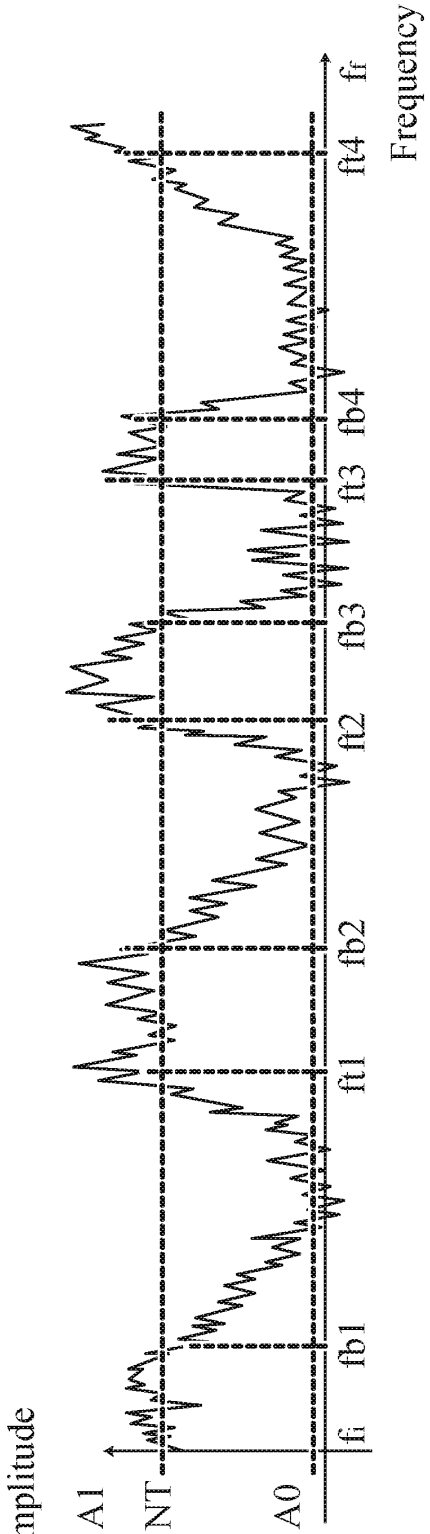


FIG. 10A

FIG. 10B

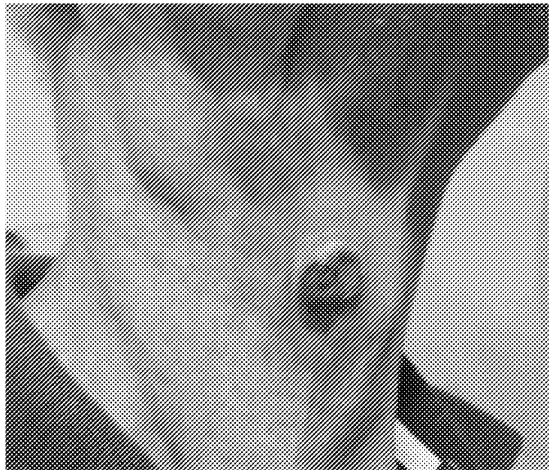


FIG. 11 A



FIG. 11 B

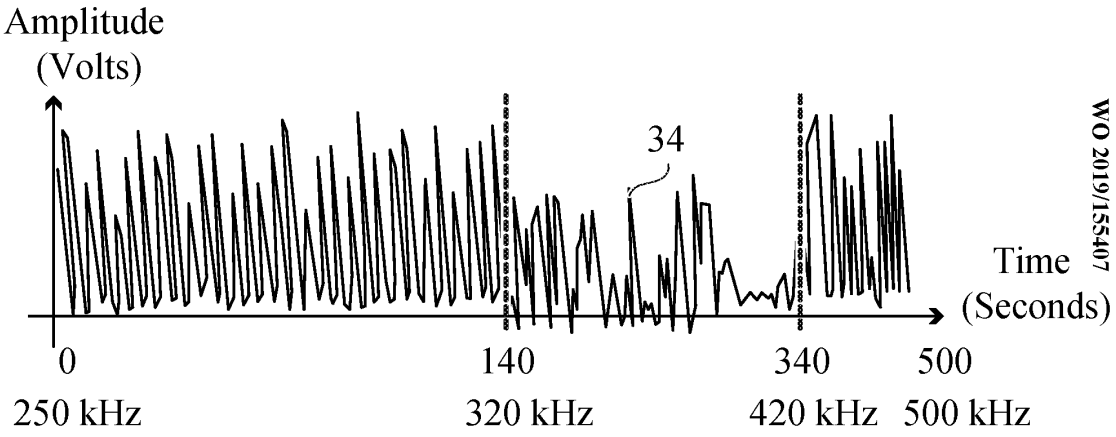


FIG. 11 C

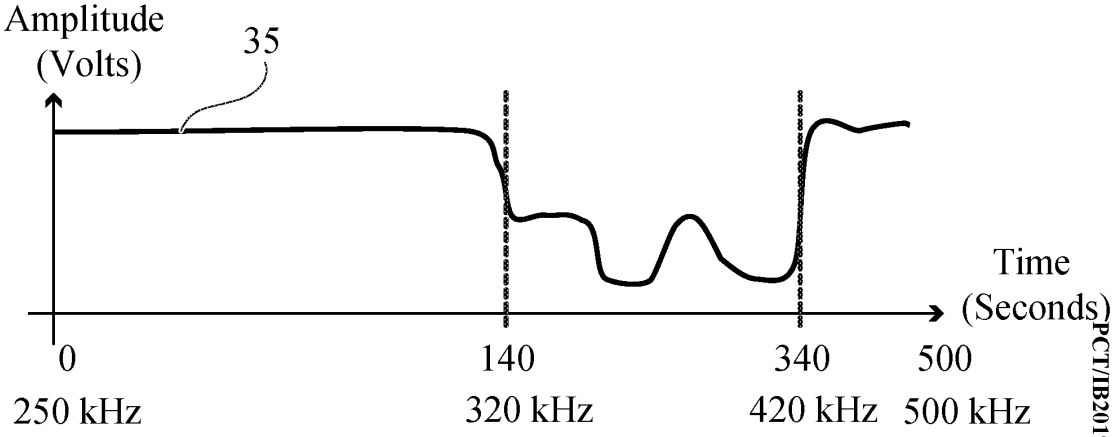


FIG. 11 D

WO 2019/155407
PCT/IB2019/051007

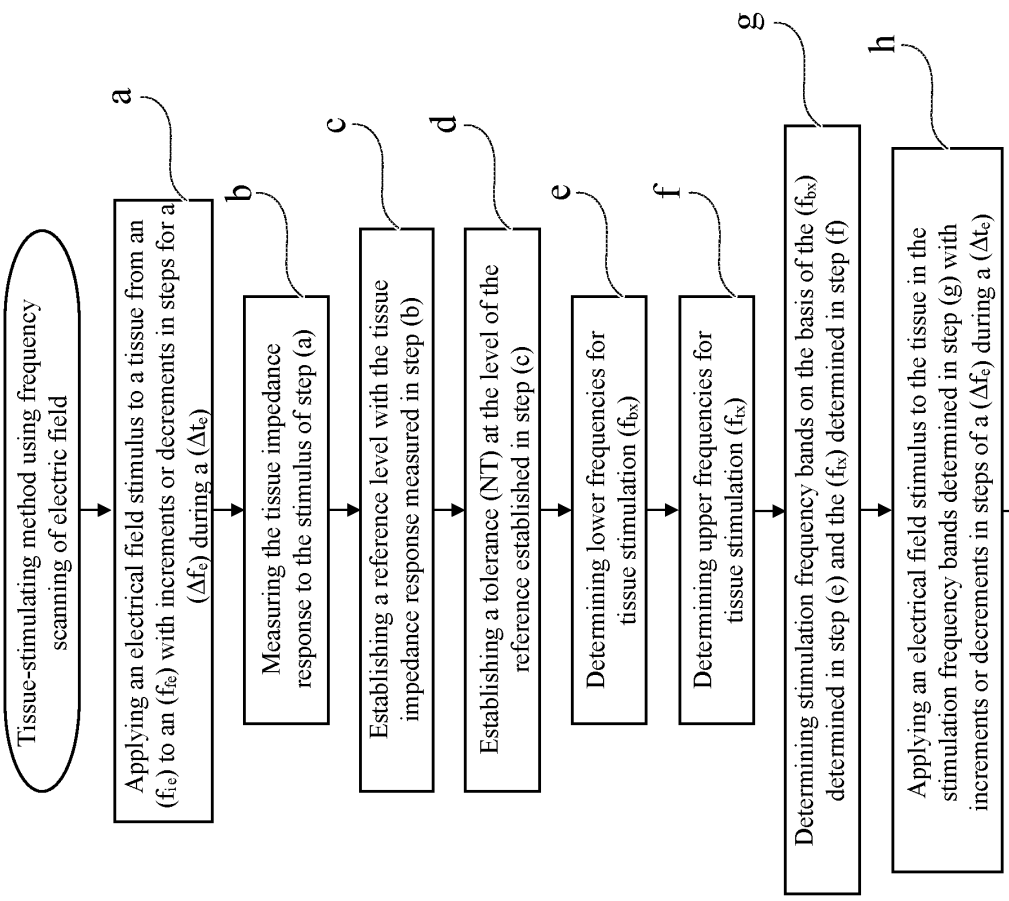

Tissue-stimulating method using frequency scanning of electric field
a
Applying an electrical field stimulus to a tissue from an (f_{ie}) to an (f_{fe}) with increments or decrements in steps for a (Δf_e) during a (Δt_e)
b
Measuring the tissue impedance response to the stimulus of step (a)
c
Establishing a reference level with the tissue impedance response measured in step (b)
d
Establishing a tolerance (NT) at the level of the reference established in step (c)
e
Determining lower frequencies for tissue stimulation (f_{bx})
f
Determining upper frequencies for tissue stimulation (f_{tx})
g
Determining stimulation frequency bands on the basis of the (f_{bx}) determined in step (e) and the (f_{tx}) determined in step (f)
h
Applying an electrical field stimulus to the tissue in the stimulation frequency bands determined in step (g) with increments or decrements in steps of a (Δf_e) during a (Δt_e)
End

FIG. 12

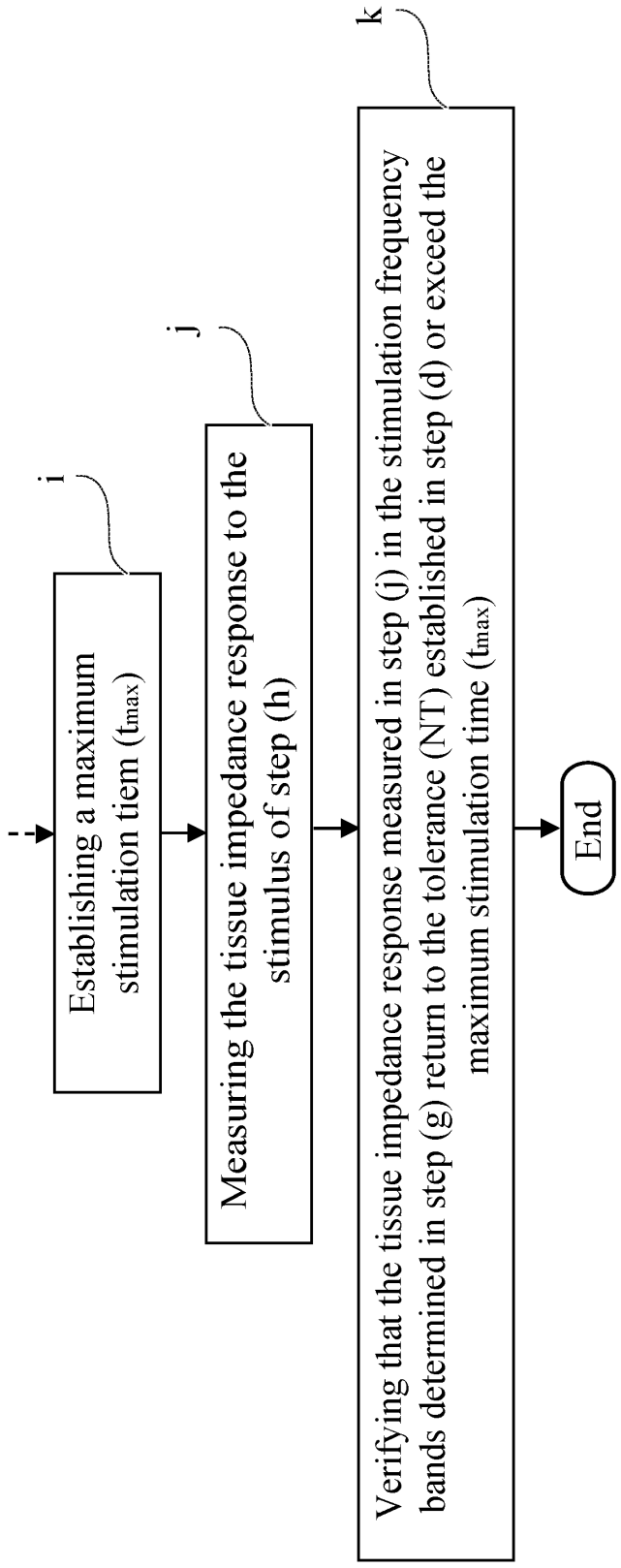

i
Establishing a maximum stimulation tiem (t_{max})
j
Measuring the tissue impedance response to the stimulus of step (h)
k
Verifying that the tissue impedance response measured in step (j) in the stimulation frequency bands determined in step (g) return to the tolerance (NT) established in step (d) or exceed the maximum stimulation time (t_{max})
End

FIG. 13

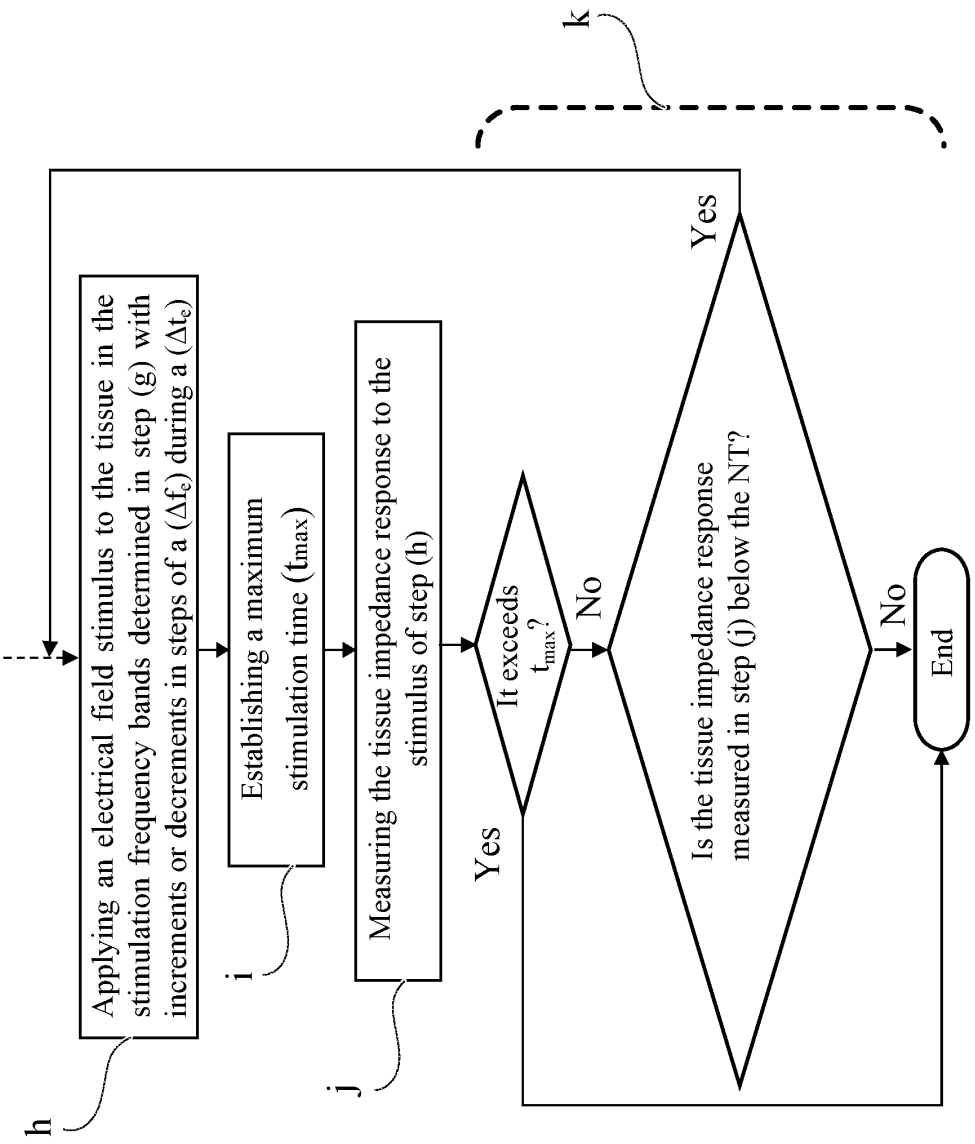

h
Applying an electrical field stimulus to the tissue in the stimulation frequency bands determined in step (g) with increments or decrements in steps of a (Δf_c) during a (Δt_c)
i
Establishing a maximum stimulation time (t_{max})
j
Measuring the tissue impedance response to the stimulus of step (h)
It exceeds t_{max}?
Yes
No
Is the tissue impedance response measured in step (j) below the NT?
Yes
No
End
k

FIG. 14

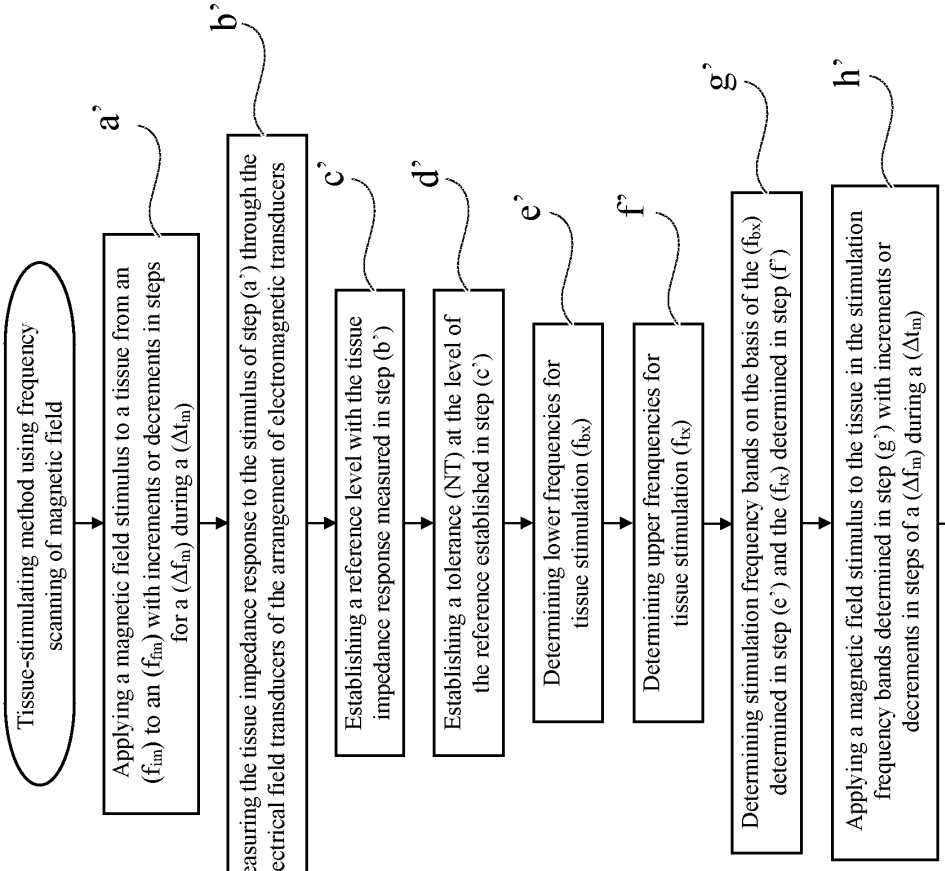

Tissue-stimulating method using frequency scanning of magnetic field
a'
Applying a magnetic field stimulus to a tissue from an (f_{im}) to an (f_{fm}) with increments or decrements in steps for a (Δf_m) during a (Δt_m)
b'
Measuring the tissue impedance response to the stimulus of step (a') through the electrical field transducers of the arrangement of electromagnetic transducers
c'
Establishing a reference level with the tissue impedance response measured in step (b')
d'
Establishing a tolerance (NT) at the level of the reference established in step (c')
e'
Determining lower frequencies for tissue stimulation (f_{bx})
f'
Determining upper frenquencies for tissue stimulation (f_{tx})
g'
Determining stimulation frequency bands on the basis of the (f_{bx}) determined in step (e') and the (f_{tx}) determined in step (f')
h'
Applying a magnetic field stimulus to the tissue in the stimulation frequency bands determined in step (g') with increments or decrements in steps of a (Δf_m) during a (Δt_m)
End

FIG. 15

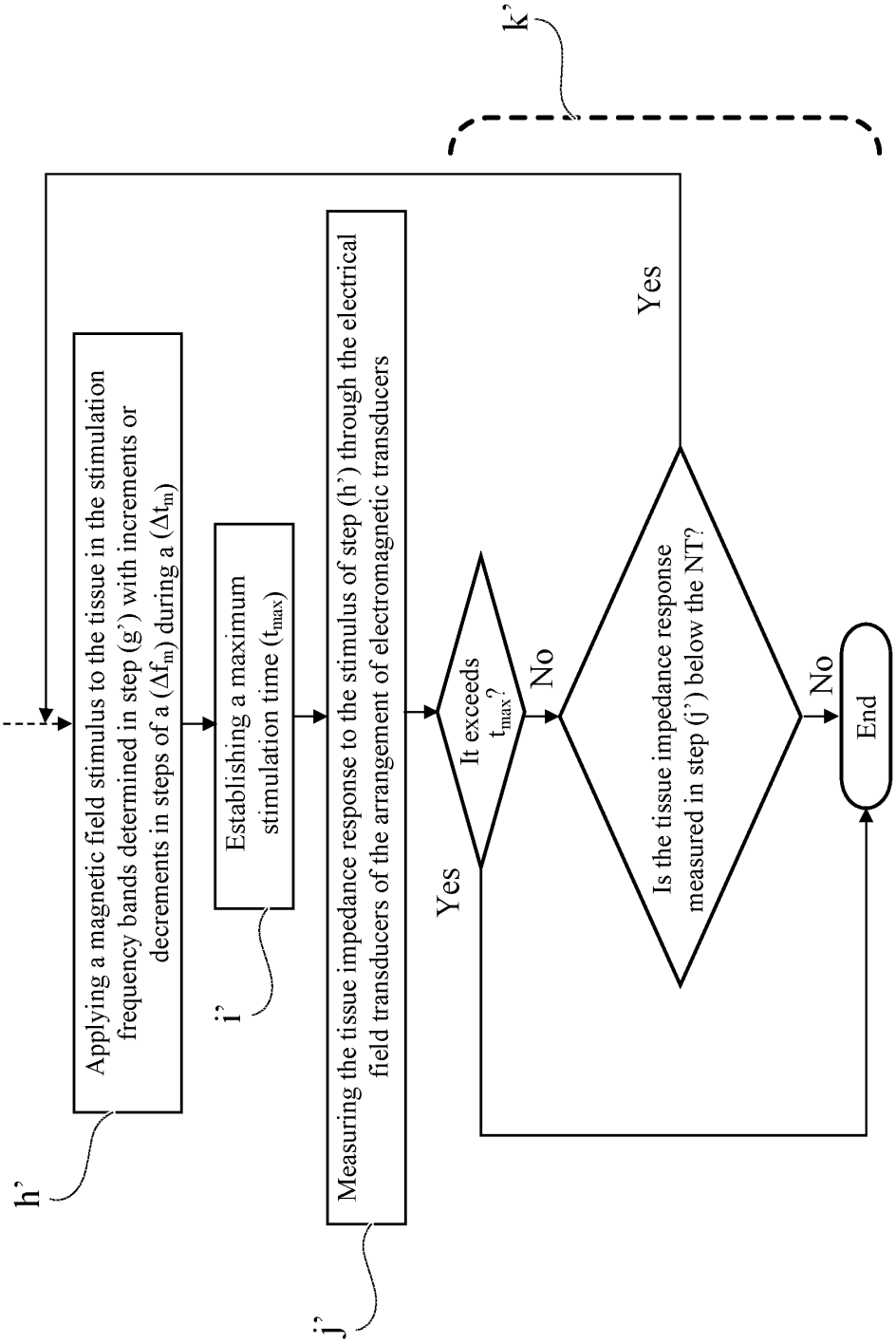

h'
Applying a magnetic field stimulus to the tissue in the stimulation frequency bands determined in step (g') with increments or decrements in steps of a (Δf_m) during a (Δt_m)
i'
Establishing a maximum stimulation time (t_{max})
j'
Measuring the tissue impedance response to the stimulus of step (h') through the electrical field transducers of the arrangement of electromagnetic transducers
It exceeds t_{max}?
Yes
No
Is the tissue impedance response measured in step (j') below the NT?
Yes
No
End
k'

FIG. 16

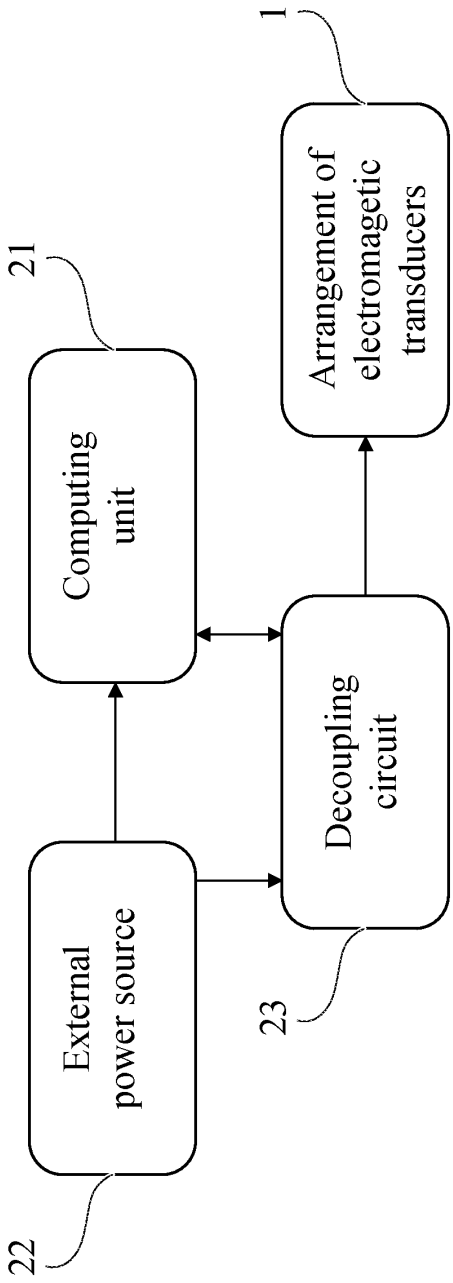

1
Arrangement of electromagetic transducers
21
Computing unit
Decoupling circuit
23
External power source
22

FIG. 17

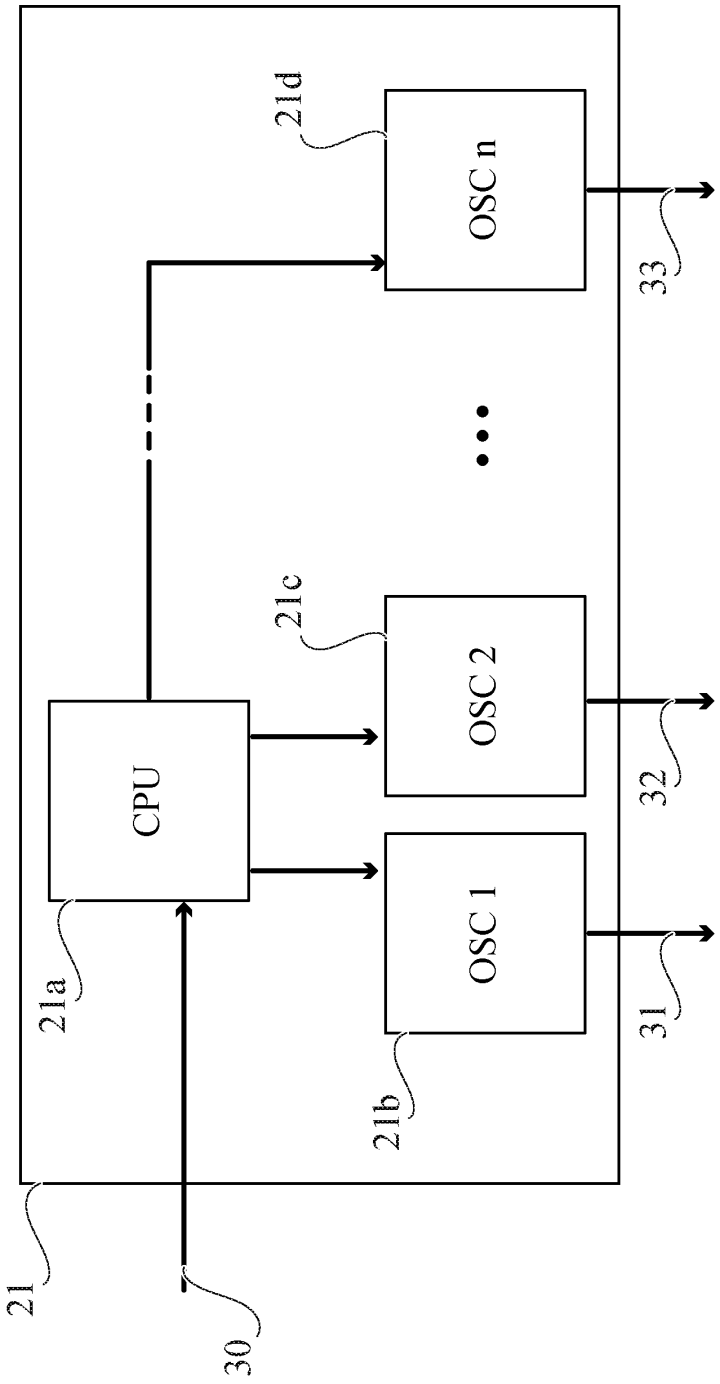


FIG. 18