(19) SUOMI - FINLAND
(FI)

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PATENT- OCH REGISTERSTYRELSEN
FINNISH PATENT AND REGISTRATION OFFICE

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PATENT APPLICATION MADE AVAILABLE TO THE PUBLIC

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G01B 11/00

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3 • **Titsworth, Raymond,** USA, AMERIKAN YHDYSVALLAT, (US)
4 • **Christian, Donald J.,** USA, AMERIKAN YHDYSVALLAT, (US)
5 • **Baird, Michael L.,** USA, AMERIKAN YHDYSVALLAT, (US)

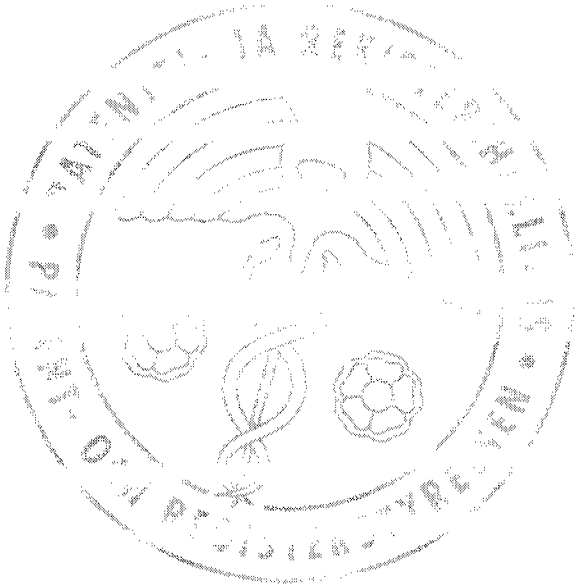
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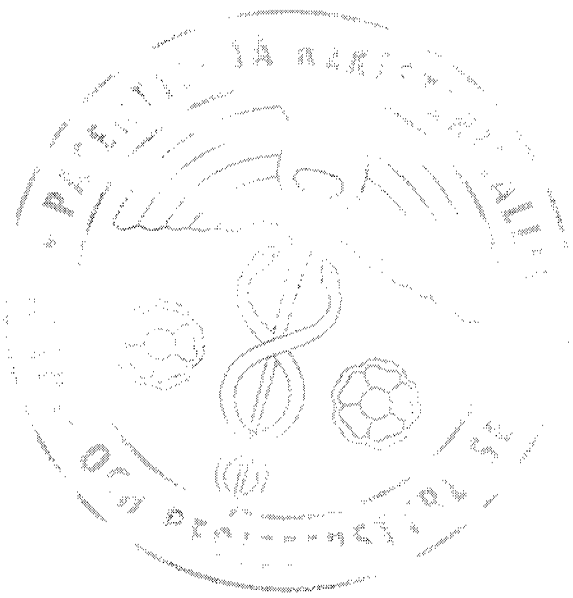
(54) Keksinnön nimitys - Uppfinningens benämning - Title of the invention

Valopyyhkäisyjärjestelmä työkappaleen asennon ja fysikaalisten ominaisuuksien määrittämiseksi

Ljusavsökningssystem för mätning av orientation och fysiska egenskaperhos ett arbetsstycke



Missing part



Missing part

FIG_1

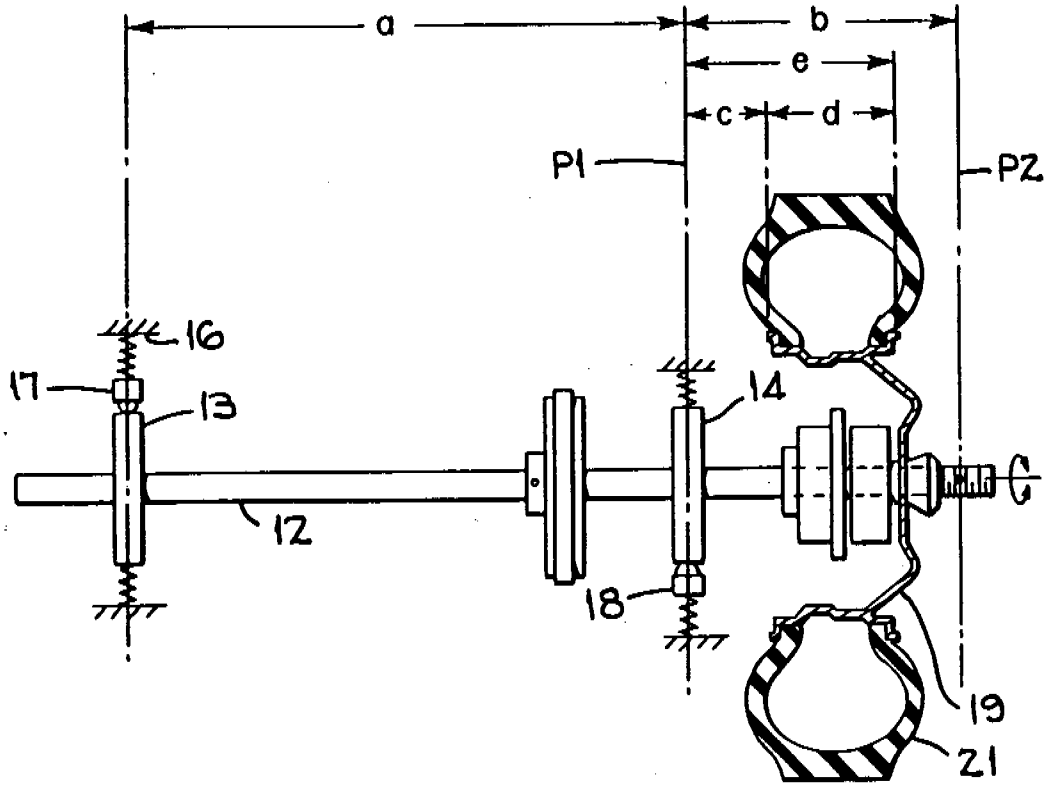
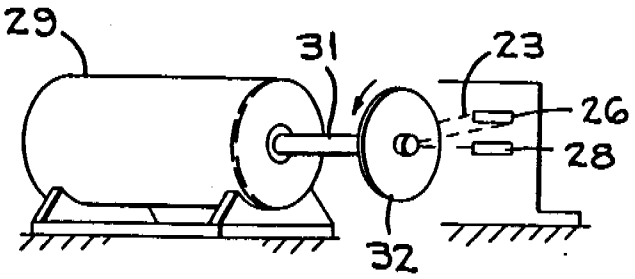


FIG_3



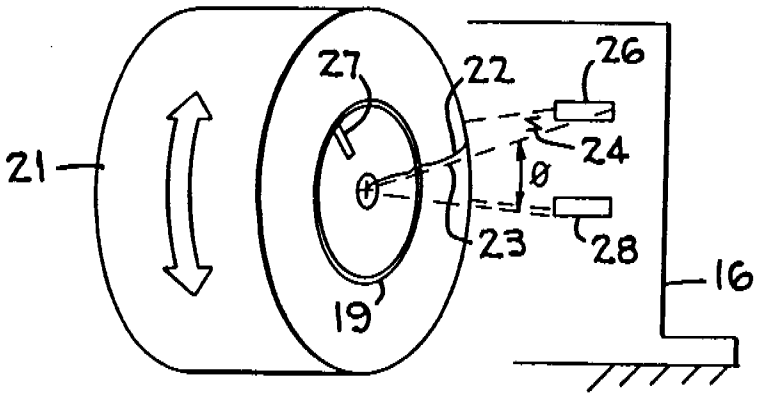


FIG_2

FIG_4

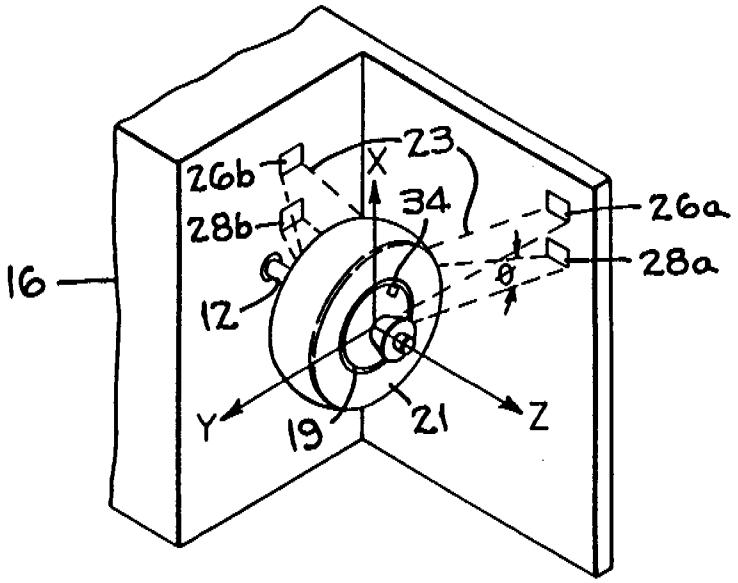

26b
23
X
34
26a
28b
28a
16
12
Y
19
21
Z

FIG_5

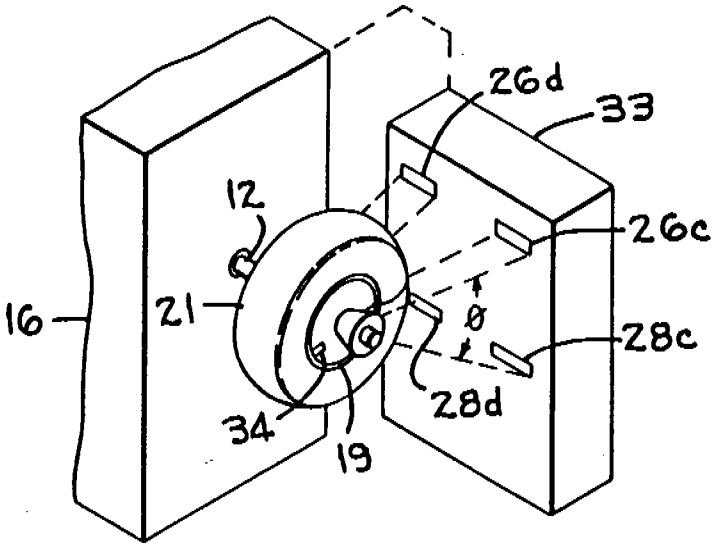

26d
33
12
26c
16
21
28c
28d
34
19

FIG_6

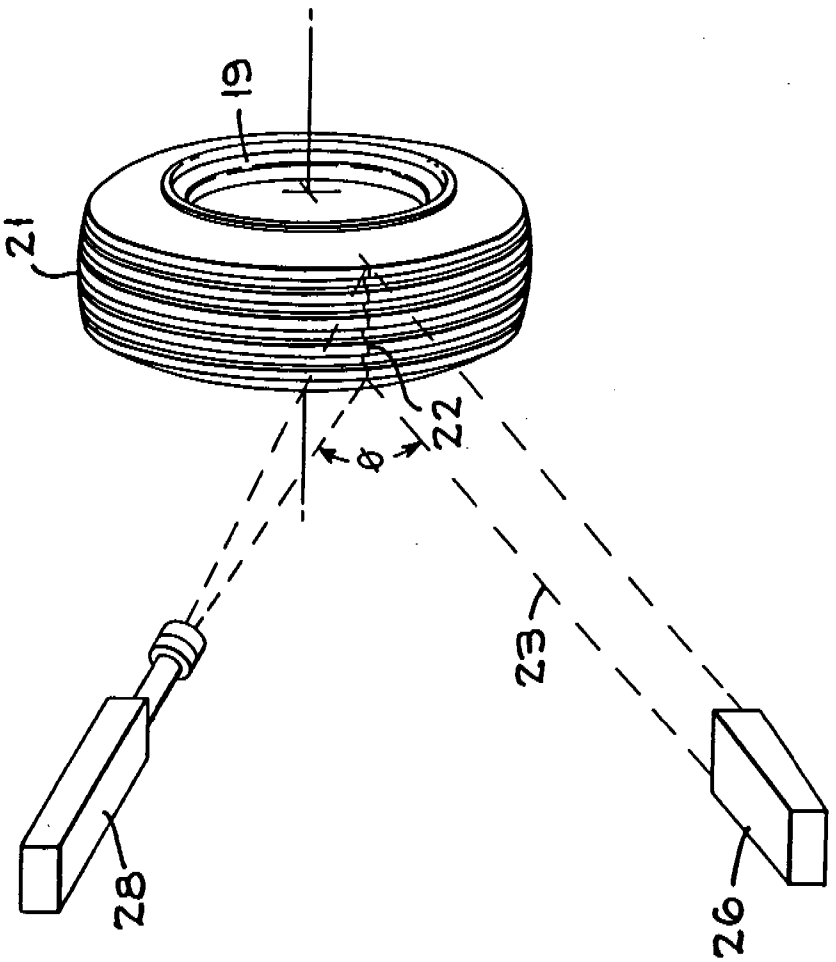


FIG_7A

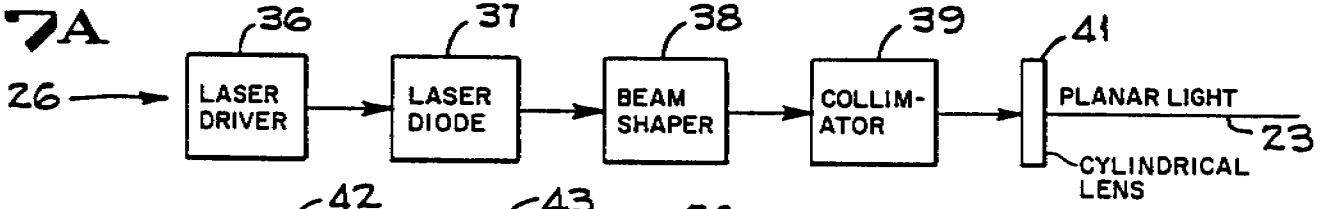


FIG_7B

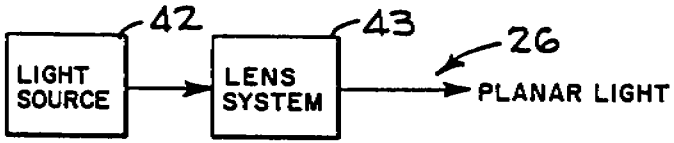


FIG_8A

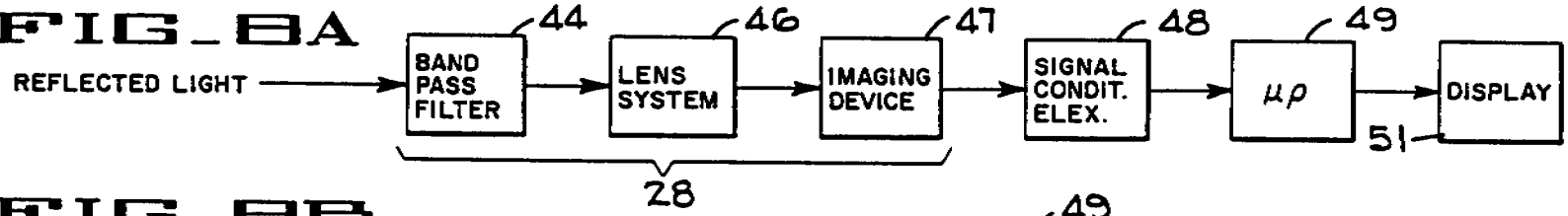


FIG_8B

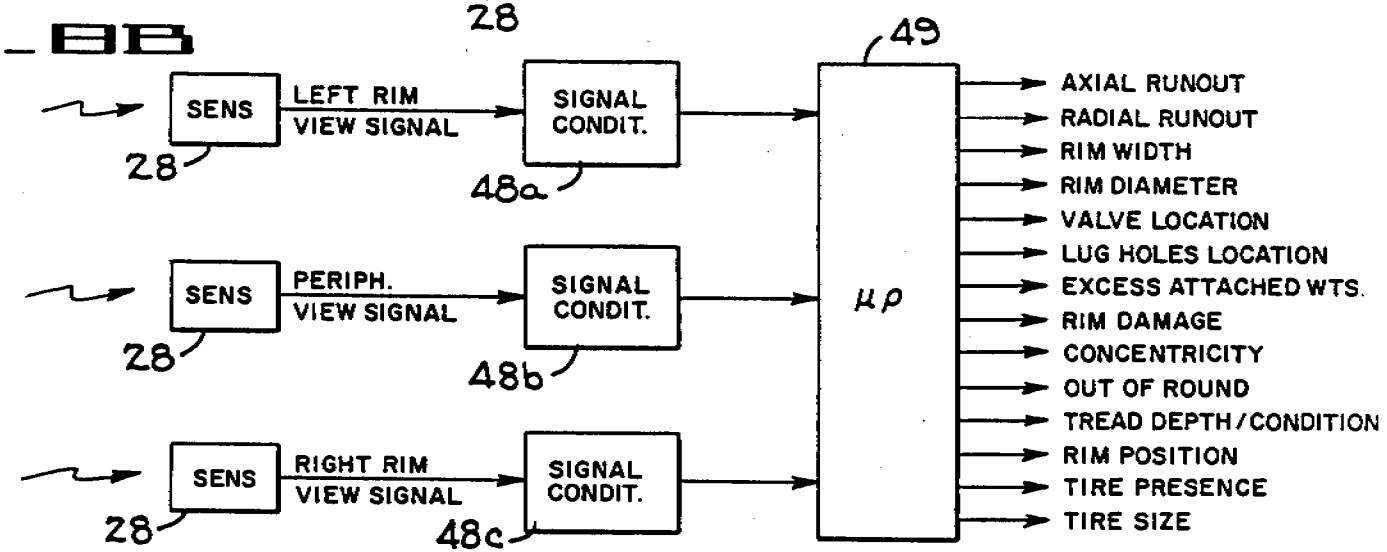


FIG_9

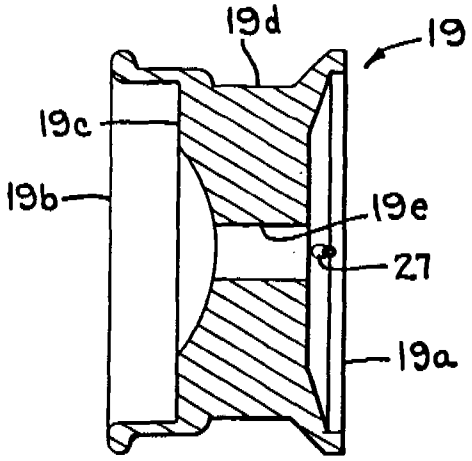


FIG_10A

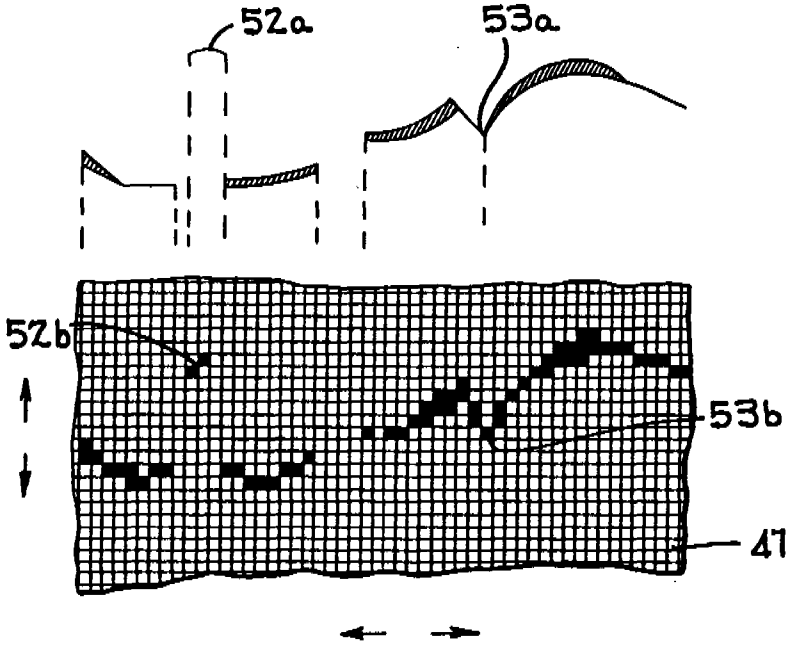


FIG_10B

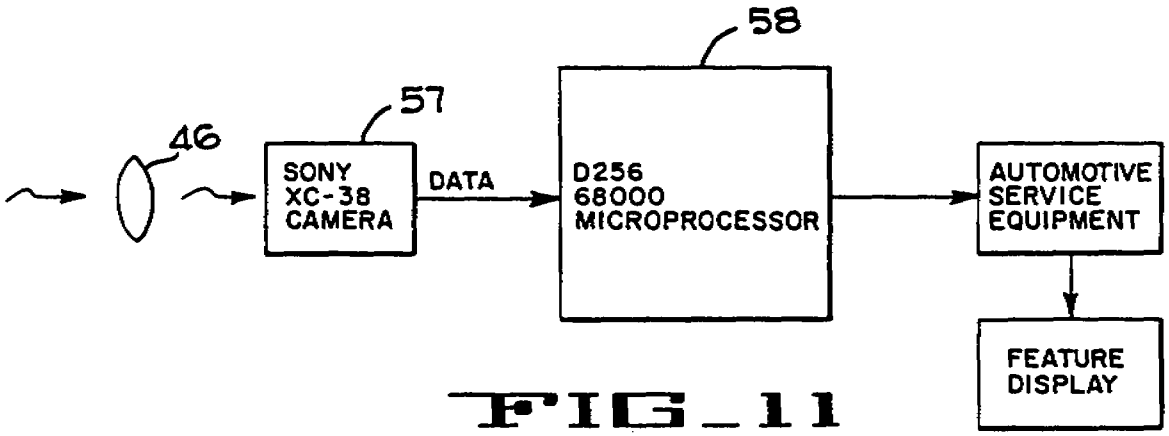

58
57
46
SONY
XC-38
CAMERA
DATA
D256
68000
MICROPROCESSOR
AUTOMOTIVE
SERVICE
EQUIPMENT
FEATURE
DISPLAY

FIG_11

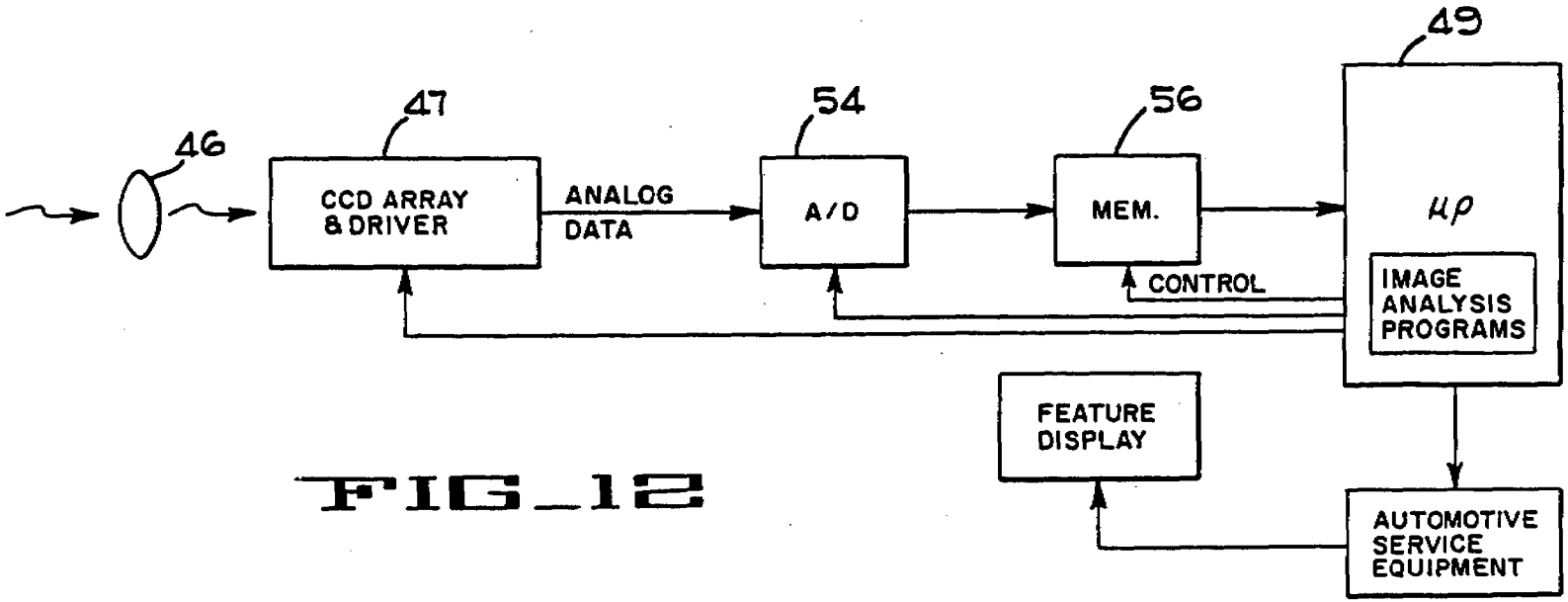
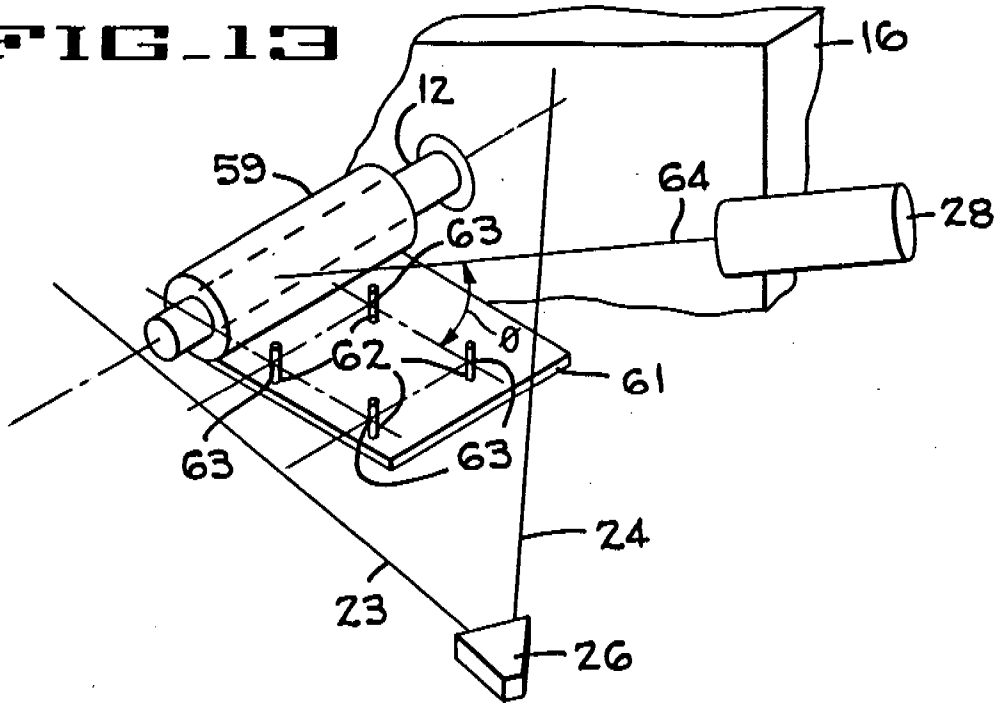

49
47
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46
CCD ARRAY
& DRIVER
ANALOG
DATA
A/D
MEM.
μp
IMAGE
ANALYSIS
PROGRAMS
CONTROL
FEATURE
DISPLAY
AUTOMOTIVE
SERVICE
EQUIPMENT

FIG_12

FIG_13


16
12
59
64
28
63
θ
62
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63
24
23
26

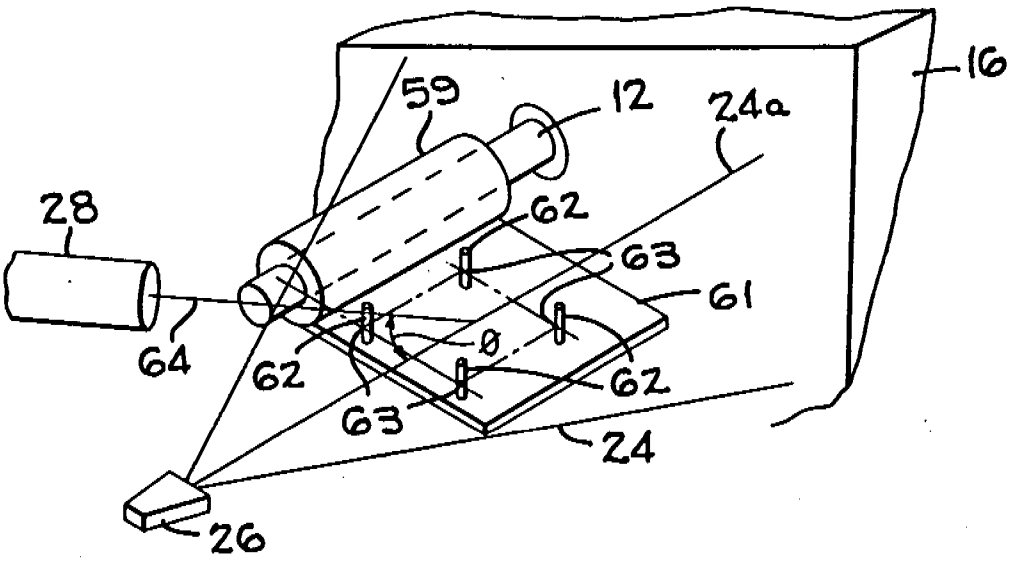
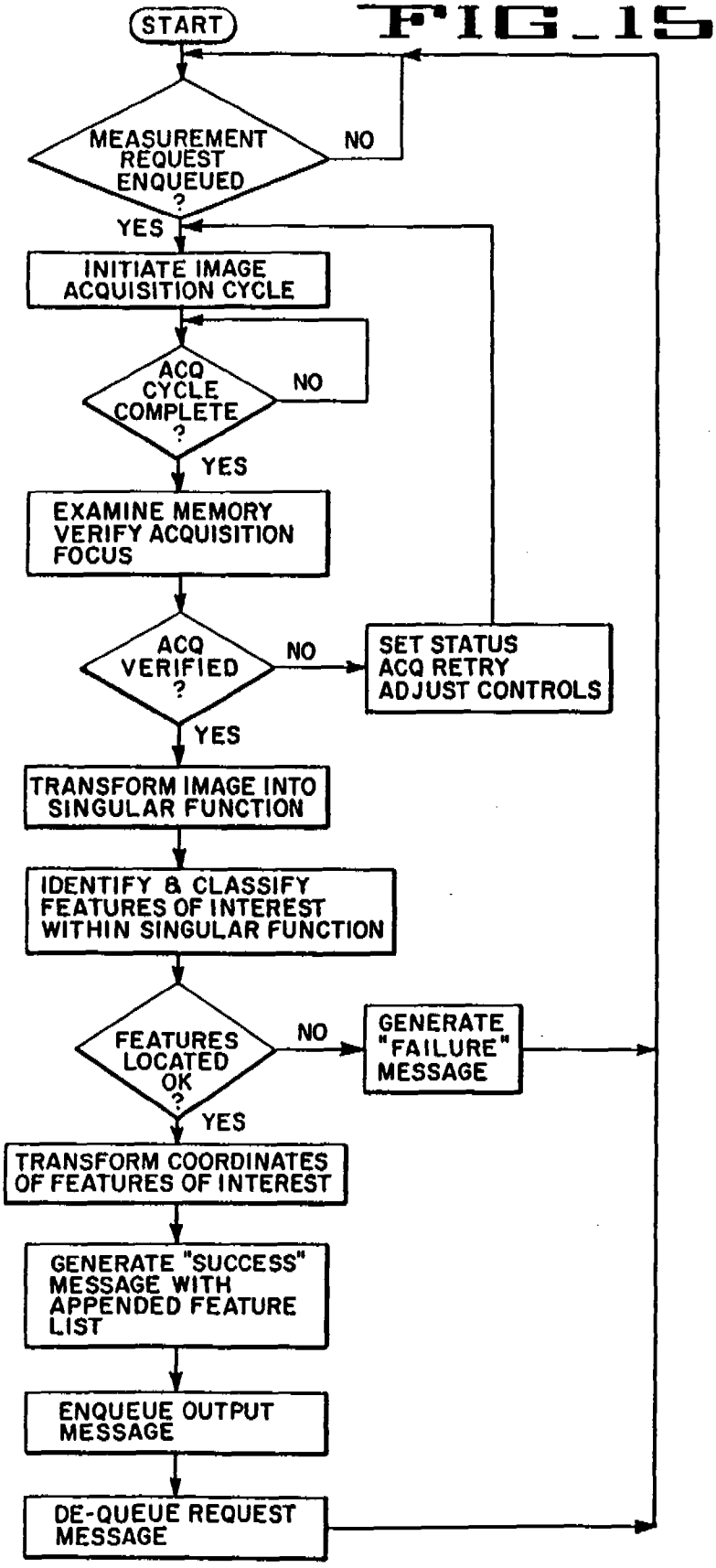

16
59
12
24a
28
62
63
61
θ
64
62
62
63
24
26

FIG_14

FIG_15


START
MEASUREMENT REQUEST ENQUEUED ?
NO
YES
INITIATE IMAGE ACQUISITION CYCLE
ACQ CYCLE COMPLETE ?
NO
YES
EXAMINE MEMORY VERIFY ACQUISITION FOCUS
ACQ VERIFIED ?
NO
SET STATUS ACQ RETRY ADJUST CONTROLS
YES
TRANSFORM IMAGE INTO SINGULAR FUNCTION
IDENTIFY & CLASSIFY FEATURES OF INTEREST WITHIN SINGULAR FUNCTION
FEATURES LOCATED OK ?
NO
GENERATE "FAILURE" MESSAGE
YES
TRANSFORM COORDINATES OF FEATURES OF INTEREST
GENERATE "SUCCESS" MESSAGE WITH APPENDED FEATURE LIST
ENQUEUE OUTPUT MESSAGE
DE-QUEUE REQUEST MESSAGE