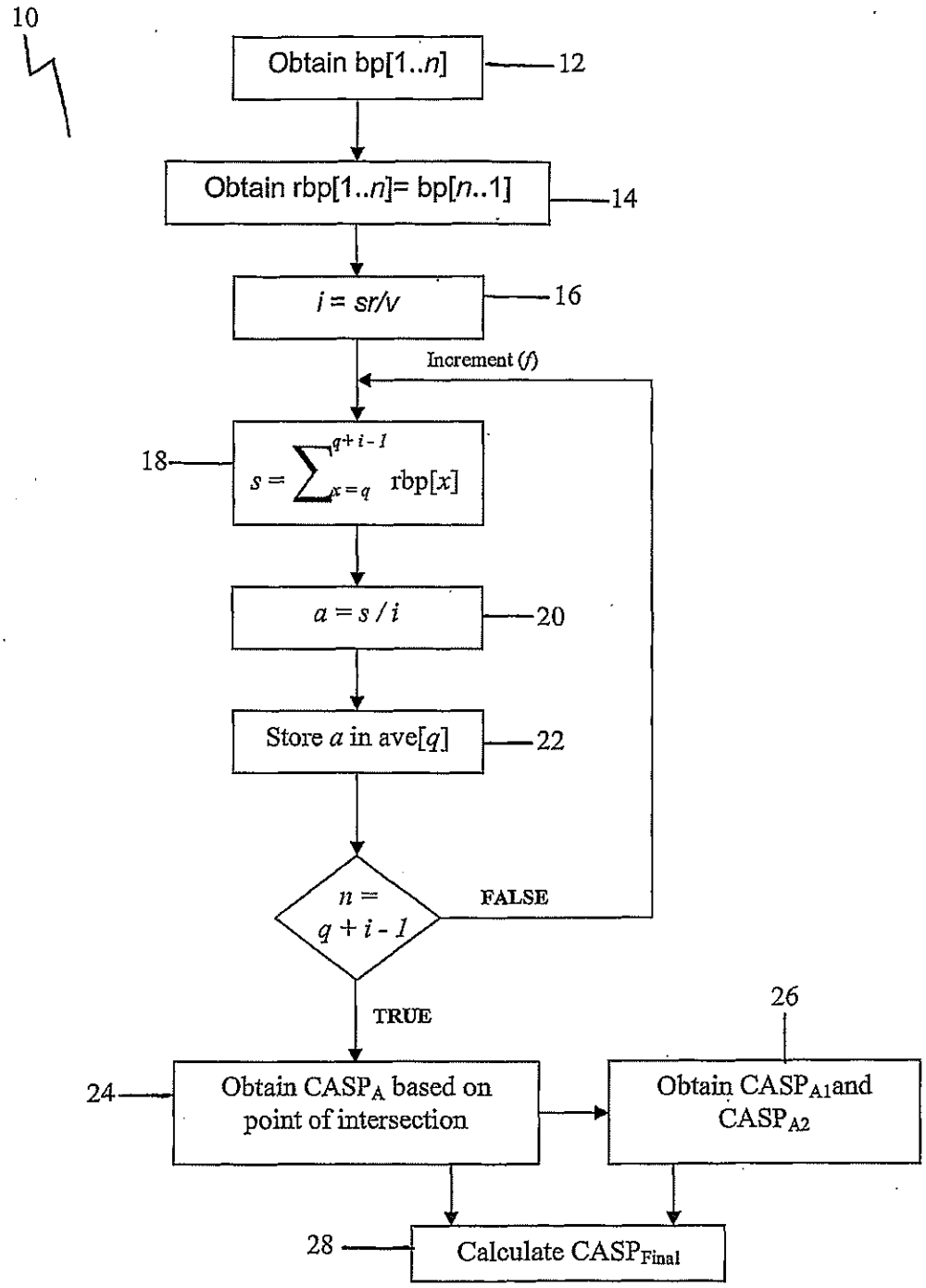

10
Obtain bp[1..n]
12
Obtain rbp[1..n]= bp[n..1]
14
i = sr/v
16
Increment (f)
18
$s = \sum_{x=q}^{q+i-1} \text{rbp}[x]$
a = s / i
20
Store a in ave[q]
22
n = q + i - 1
FALSE
TRUE
26
24
Obtain CASP$_A$ based on point of intersection
Obtain CASP$_{A1}$and CASP$_{A2}$
28
Calculate CASP$_{Final}$

FIGURE 1

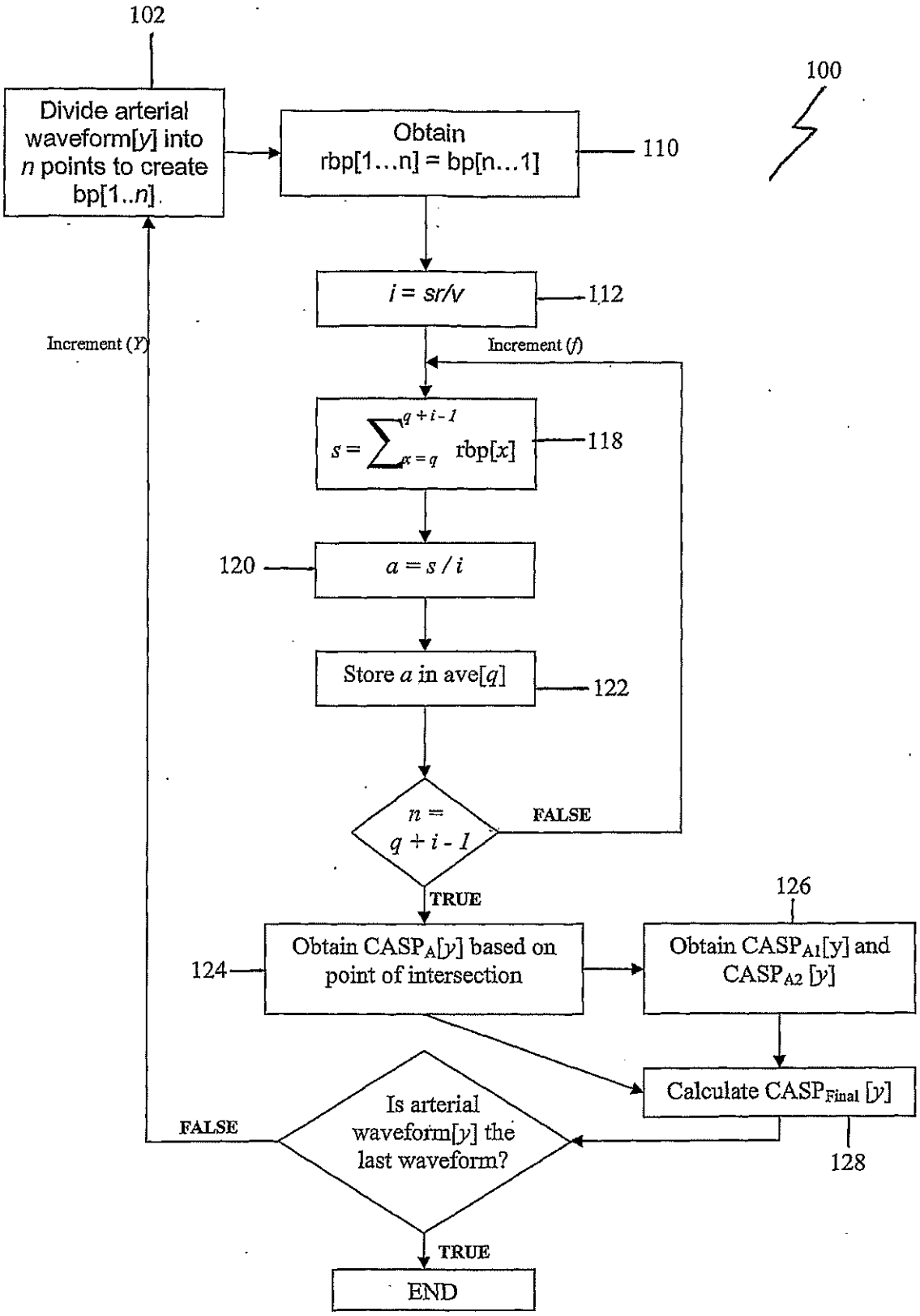

102
100
Divide arterial waveform[y] into n points to create bp[1..n].
Obtain rbp[1...n] = bp[n...1]
110
i = sr/v
112
Increment (Y)
Increment (f)
$s = \sum_{x=q}^{q+i-1} \text{rbp}[x]$
118
120
a = s / i
Store a in ave[q]
122
n = q + i - 1
FALSE
TRUE
126
Obtain CASP_A[y] based on point of intersection
124
Obtain CASP_A1[y] and CASP_A2 [y]
Calculate CASP_Final [y]
Is arterial waveform[y] the last waveform?
FALSE
128
TRUE
END

FIGURE 2

x-coordinate	Step 12	Step 14	Step 18-22
Time, second	Original data of arterial waveform captured	Reversed arterial waveform data listed in Step 12	Regenerated data using 12 points forward moving average method from Step 14
0.017	85.0	85.0	88.3
0.033	86.0	85.7	88.9
0.050	88.9	86.6	89.6
0.067	96.8	87.9	90.3
0.083	107.9	88.1	90.9
0.100	119.2	88.2	91.7
0.117	126.1	88.2	92.6
0.133	128.0	88.5	93.6
0.150	126.6	88.4	94.6
0.167	124.2	89.6	95.6
0.183	121.1	90.5	96.5
0.200	118.8	92.5	97.4
0.217	117.5	93.0	98.1
0.233	116.8	93.9	99.3
0.250	115.6	94.4	100.7
0.267	111.2	95.8	102.5
0.283	106.5	97.6	104.2
0.300	101.9	99.0	105.9
0.317	100.5	100.1	107.5
0.333	100.3	100.5	109.3
0.350	100.5	100.5	111.2
0.367	100.5	100.3	113.4
0.383	100.1	100.5	115.7
0.400	99.0	101.9	117.9
0.417	97.6	106.5	119.3
0.433	95.8	111.2	119.4
0.450	94.4	**115.6 ($CASP_{A1}$)**	118.2
0.467	93.9	**116.8 ($CASP_{A}$)**	116.0
0.483	93.0	**117.5 ($CASP_{A2}$)**	113.4
0.500	92.5	118.8	110.7
0.517	90.5	121.1	110.0
0.533	89.6	124.2	108.9
0.550	88.4	126.6	107.2
0.567	88.5	128.0	104.7
0.583	88.2	126.1	101.4
0.600	88.2	119.2	97.3
0.617	88.1	107.9	92.9
0.633	87.9	96.8	89.2
0.650	86.6	88.9	86.6
0.667	85.7	86.0	85.5
0.683	85.0	85.0	85.0

FIGURE 3a

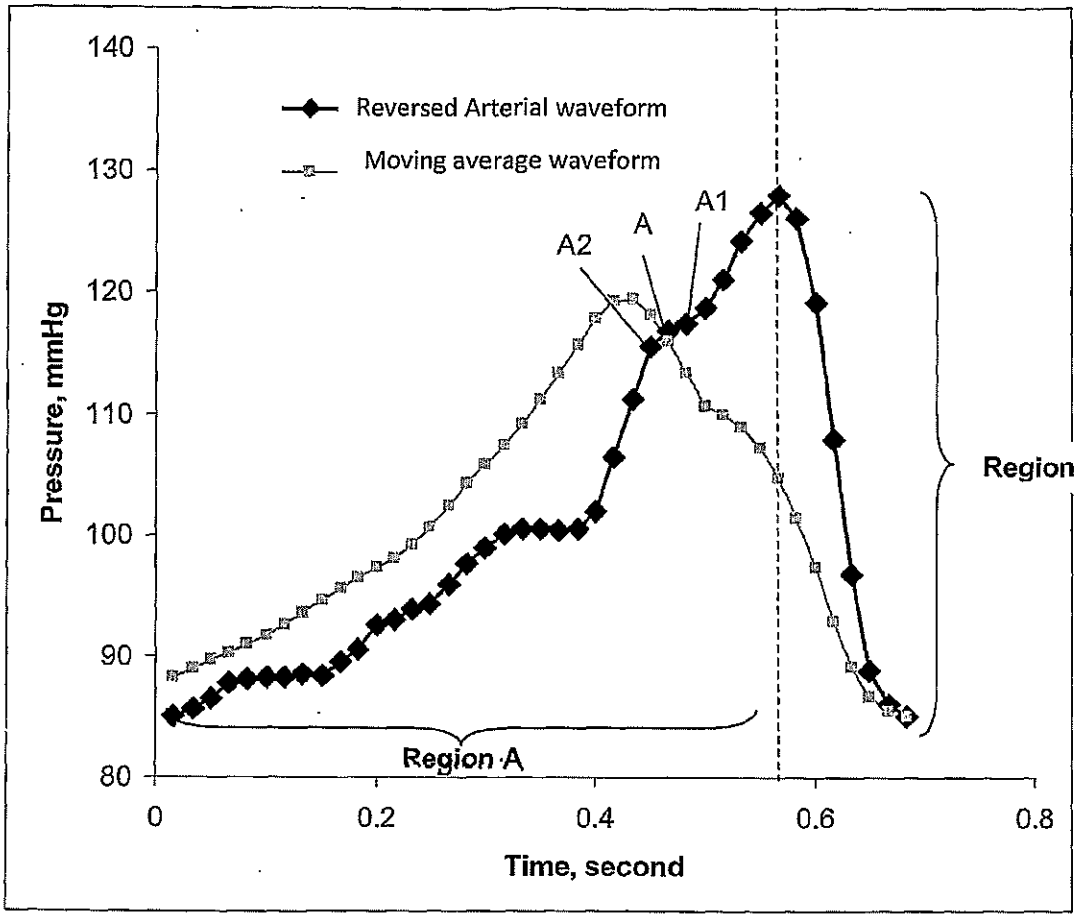

140
130
120
110
100
90
80
Pressure, mmHg
0
0.2
0.4
0.6
0.8
Time, second
Reversed Arterial waveform
Moving average waveform
A2
A
A1
Region A
Region B

FIGURE 3b