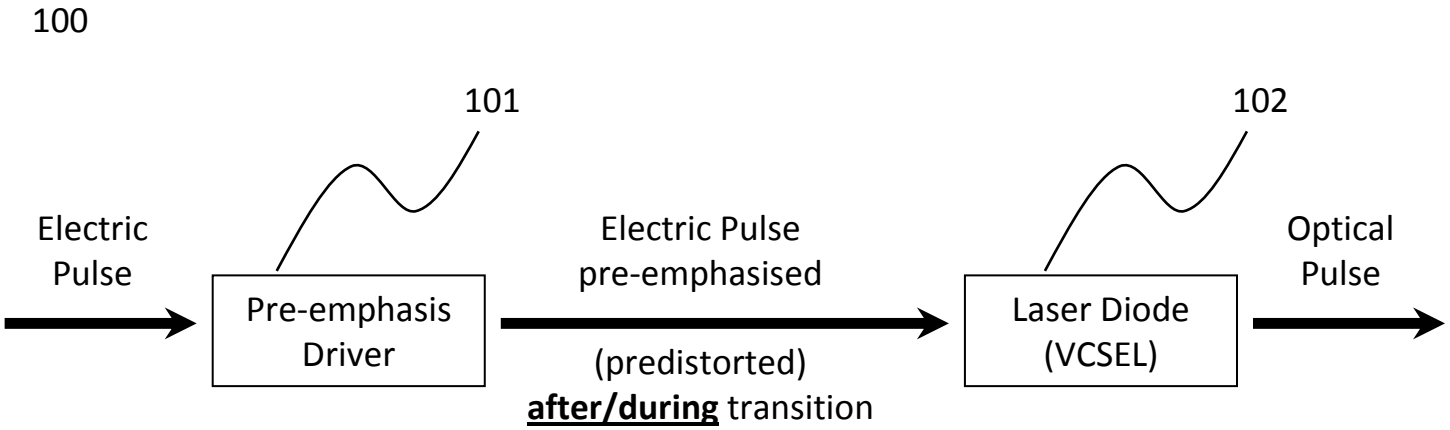


Fig. 1 Prior Art

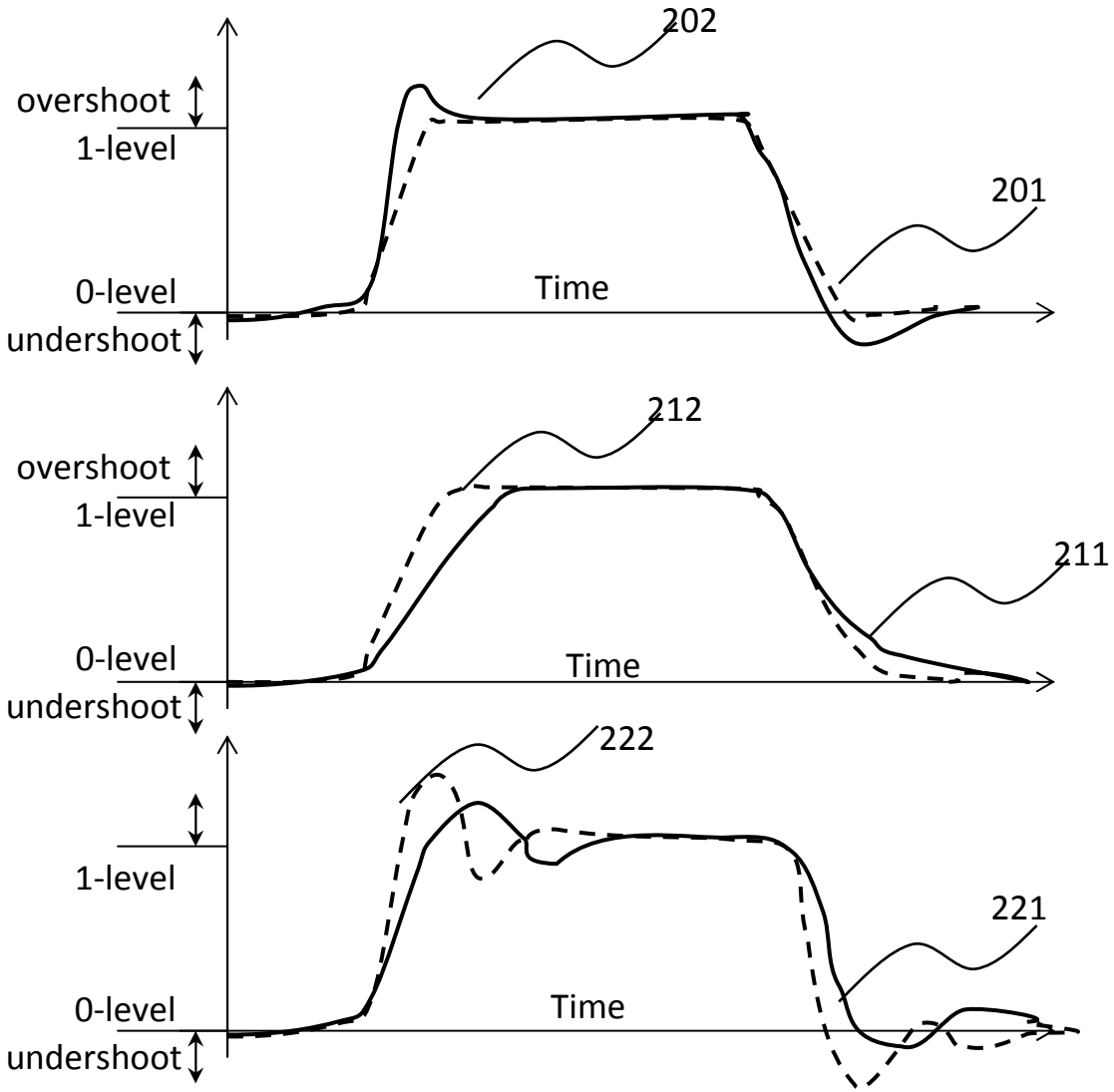


Fig. 2 Prior Art

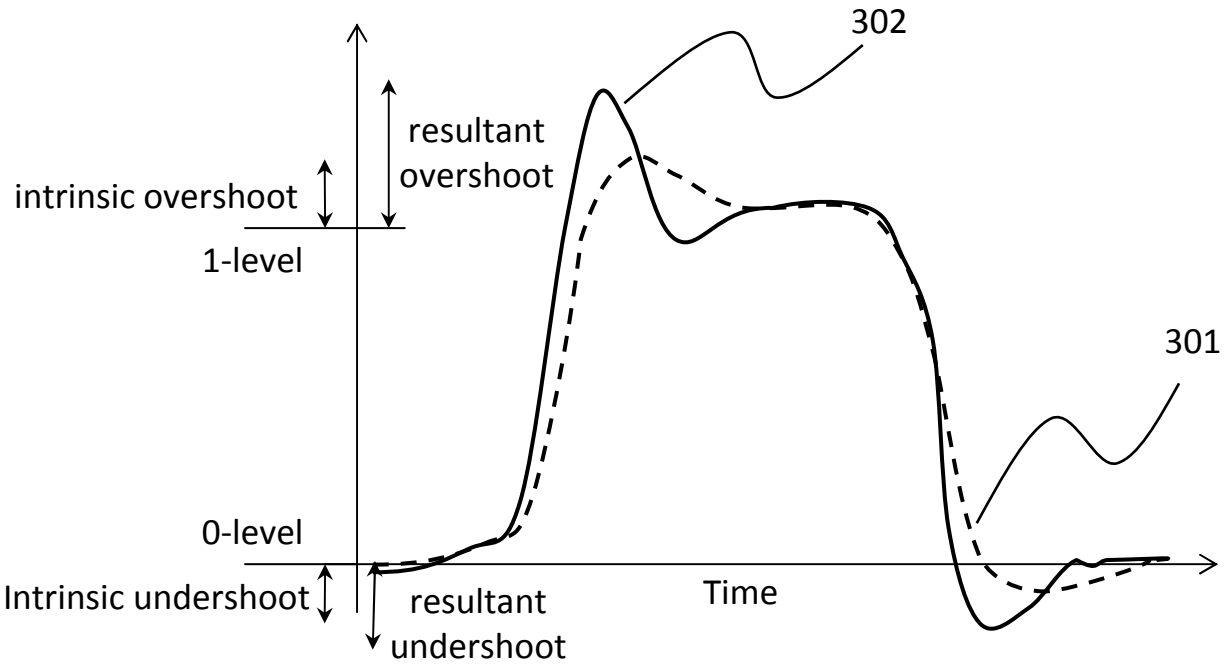


Fig. 3 Prior art

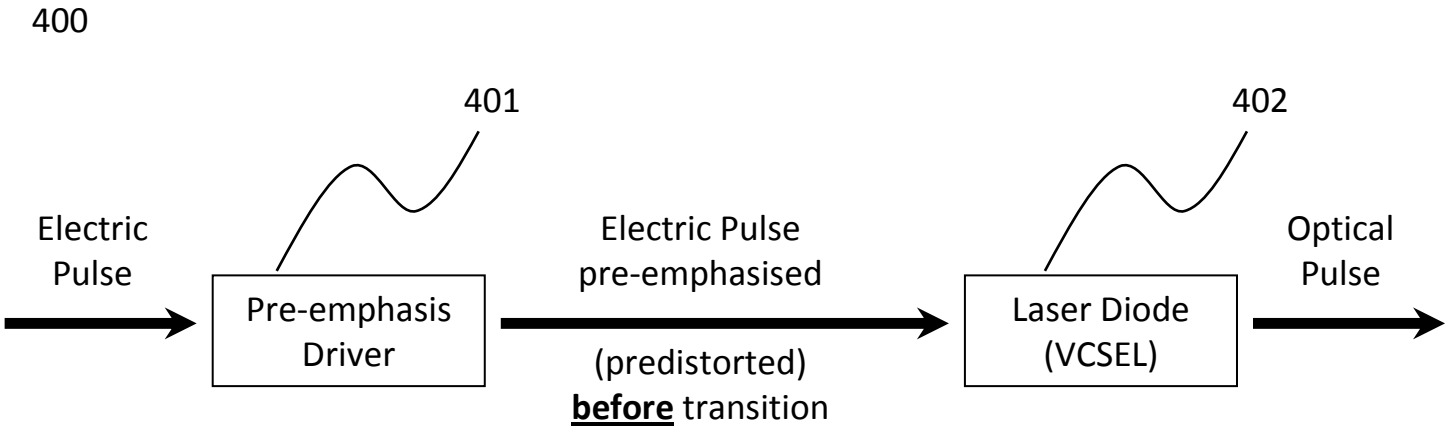

400
401
402
Electric
Pulse
Pre-emphasis
Driver
Electric Pulse
pre-emphasised
(predistorted)
before transition
Laser Diode
(VCSEL)
Optical
Pulse

Fig. 4

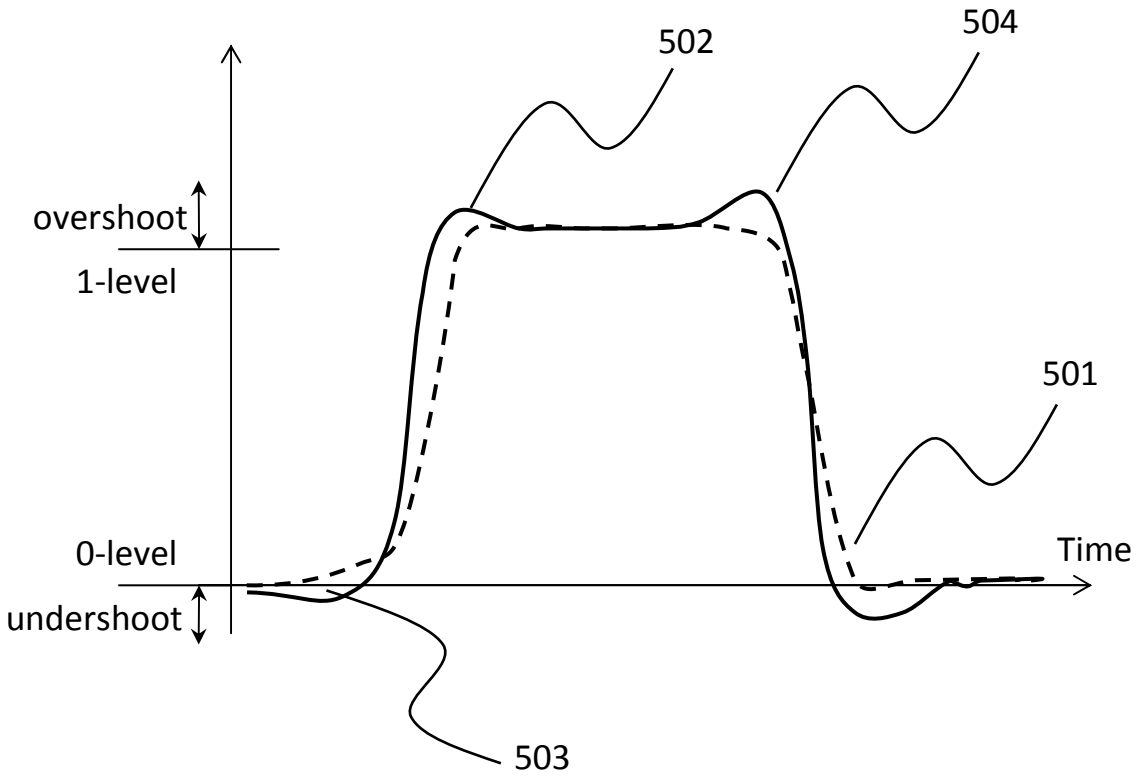


Fig. 5a

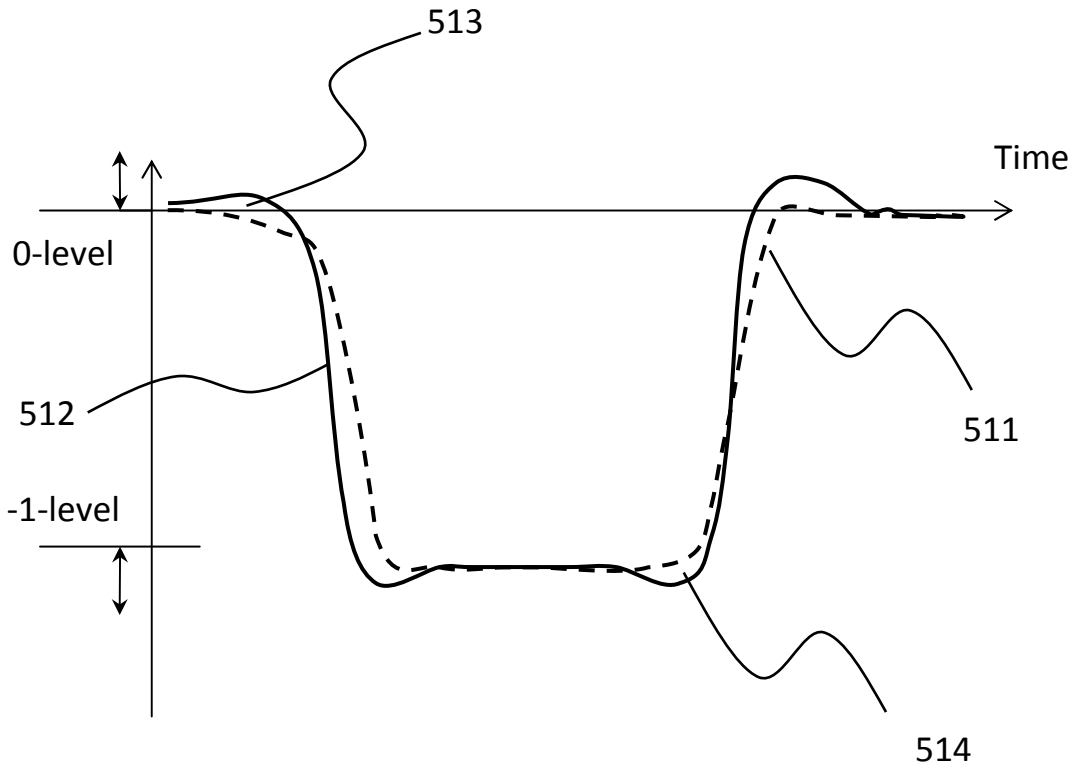


Fig. 5b

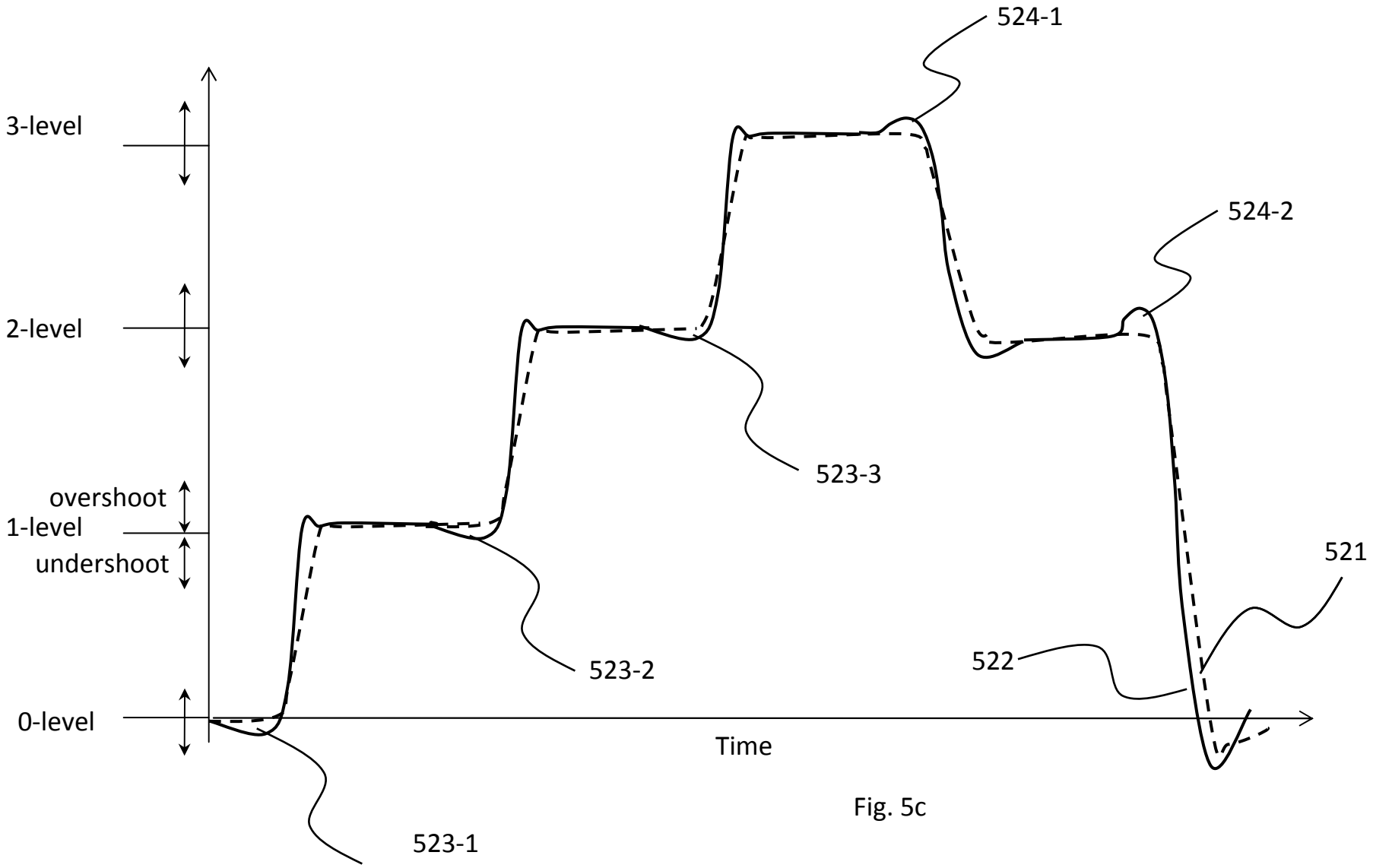

3-level
2-level
overshoot
1-level
undershoot
0-level
Time
524-1
524-2
523-3
523-2
523-1
521
522

Fig. 5c

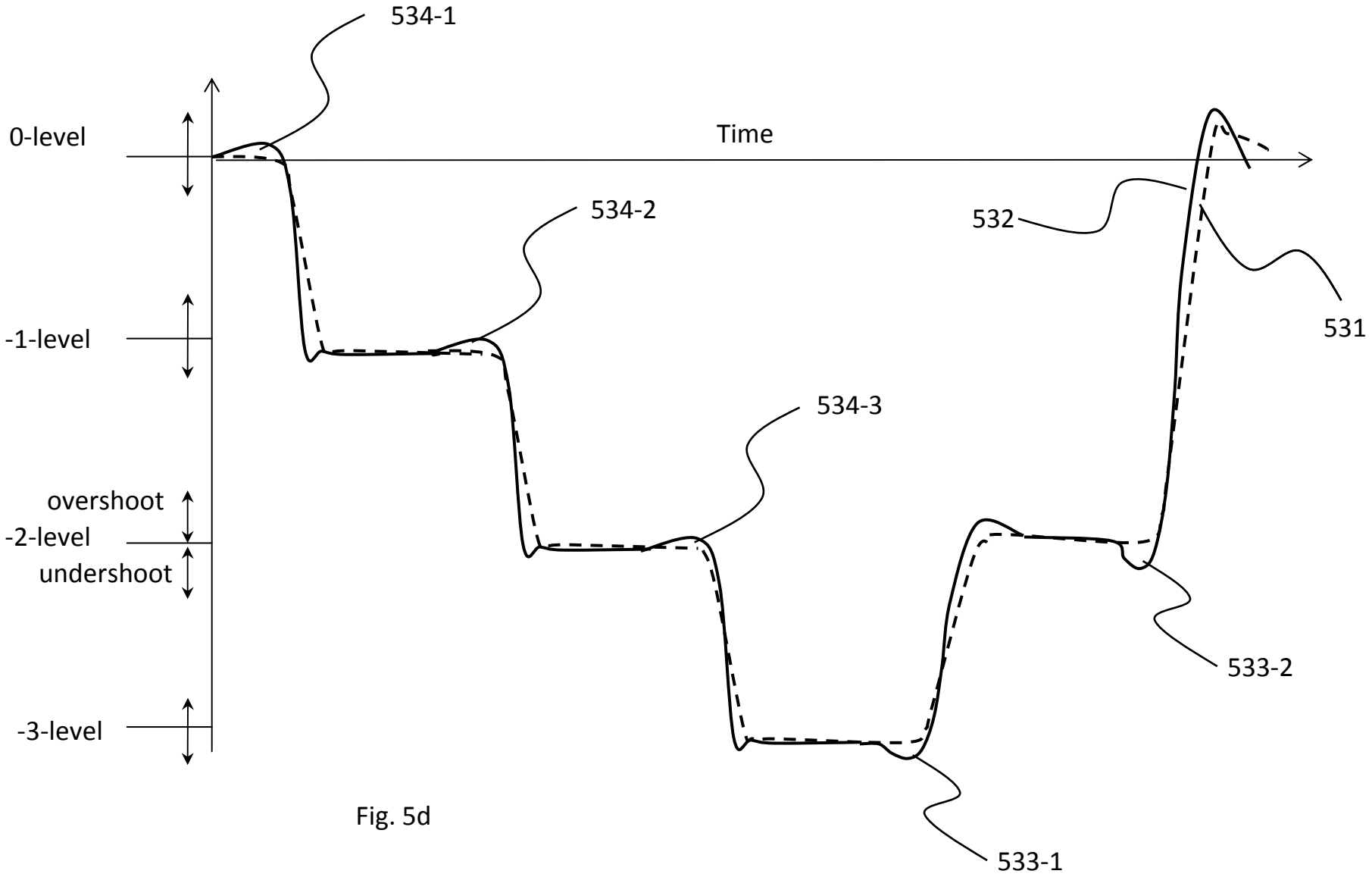

534-1
0-level
Time
534-2
532
-1-level
531
534-3
overshoot
-2-level
undershoot
533-2
-3-level
533-1

Fig. 5d

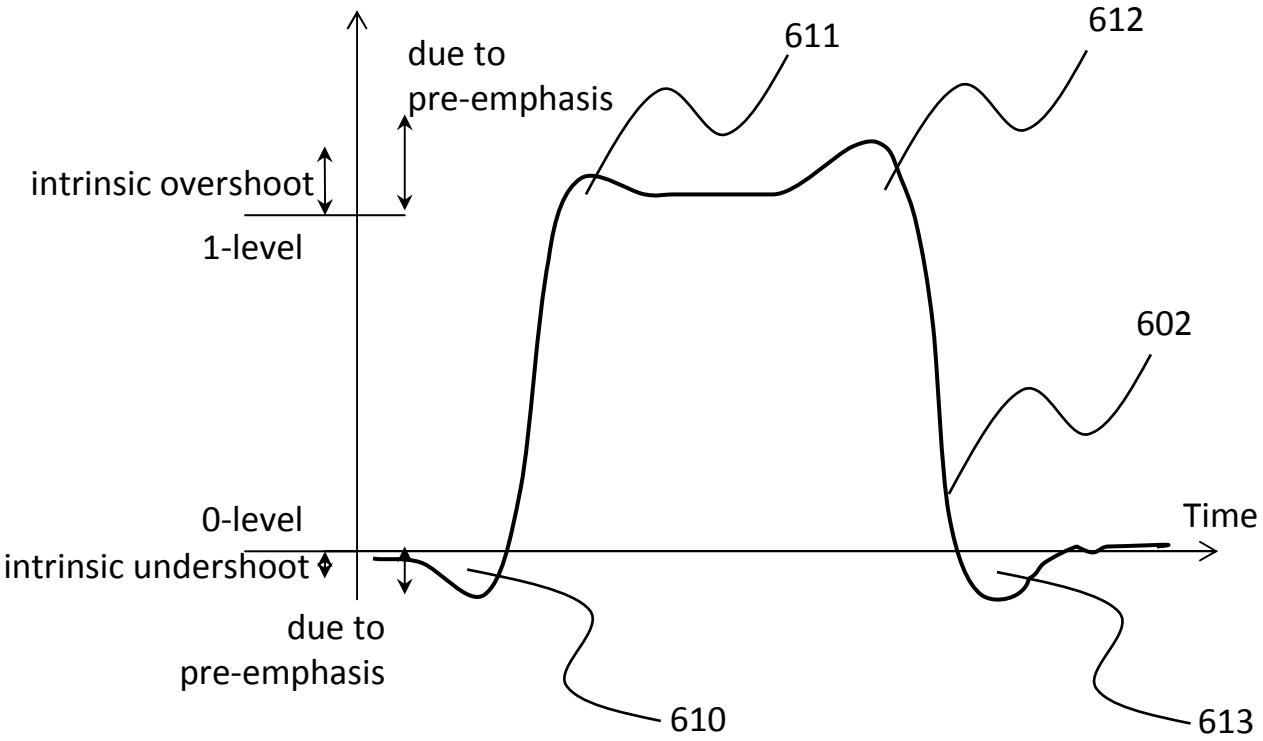

due to
pre-emphasis
611
612
intrinsic overshoot
1-level
602
0-level
Time
intrinsic undershoot
due to
pre-emphasis
610
613

Fig. 6