

FIG. 1A

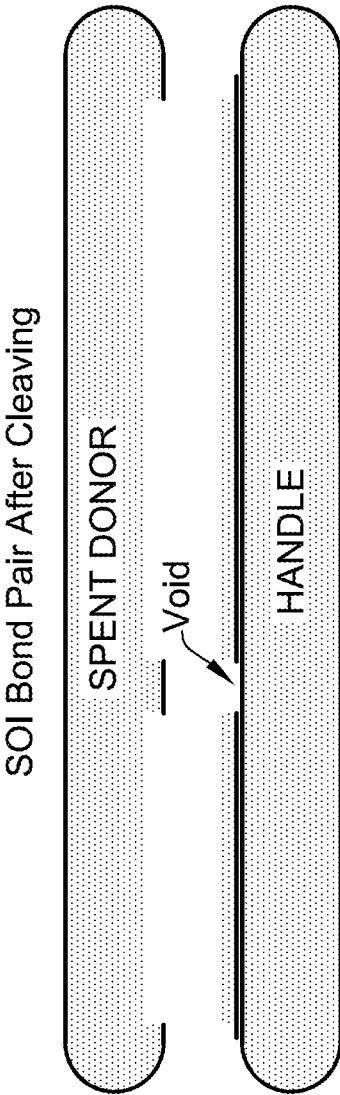


FIG. 1B

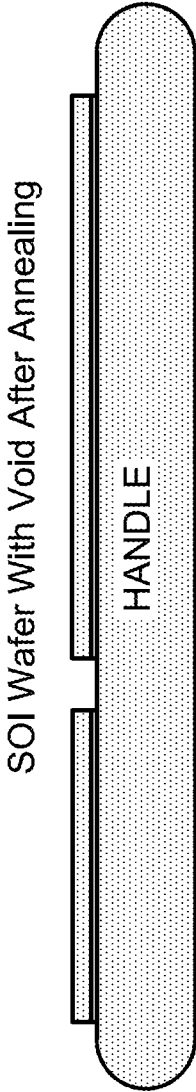


FIG. 1C

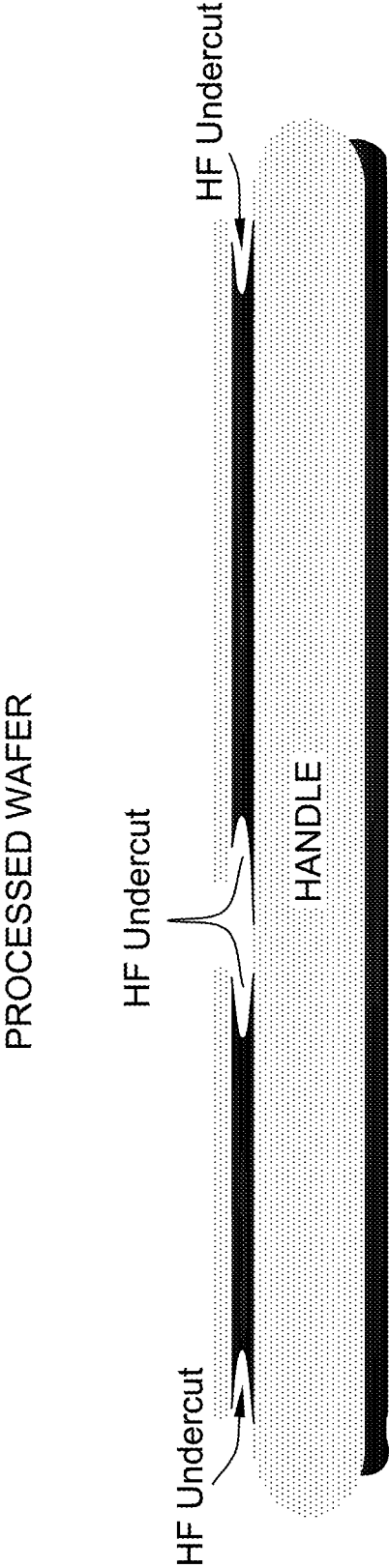


FIG. 2

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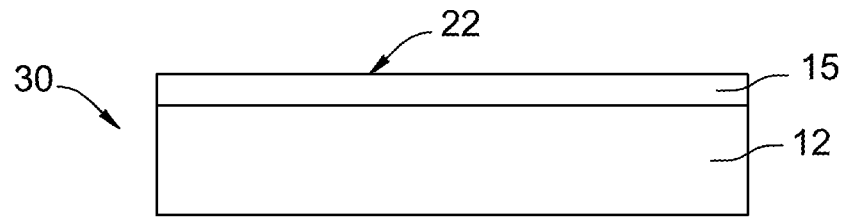


FIG. 3

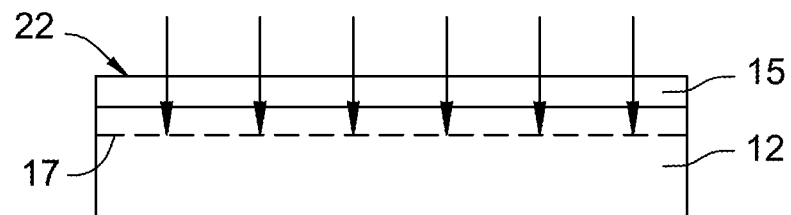


FIG. 4

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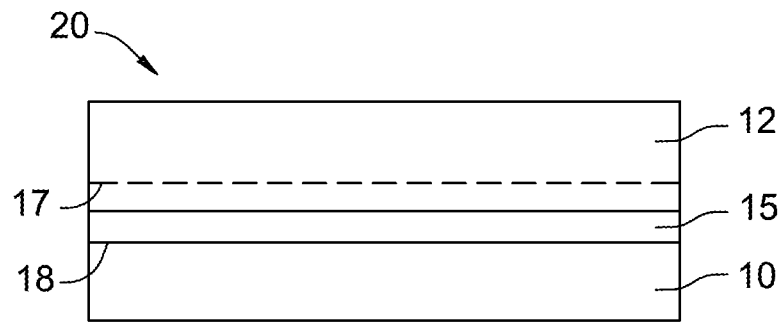


FIG. 5

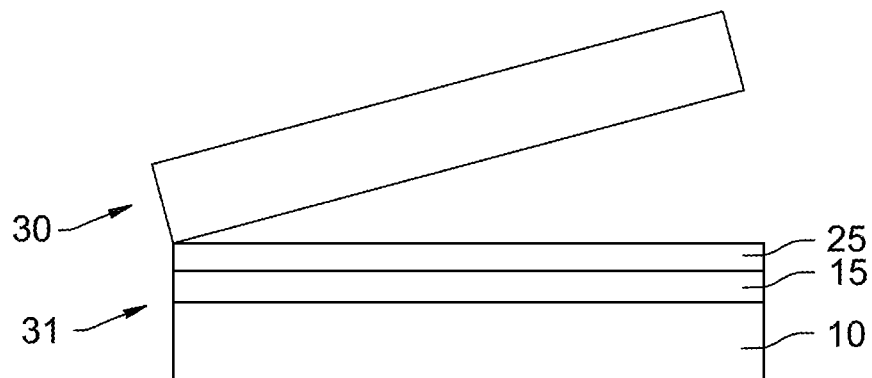


FIG. 6

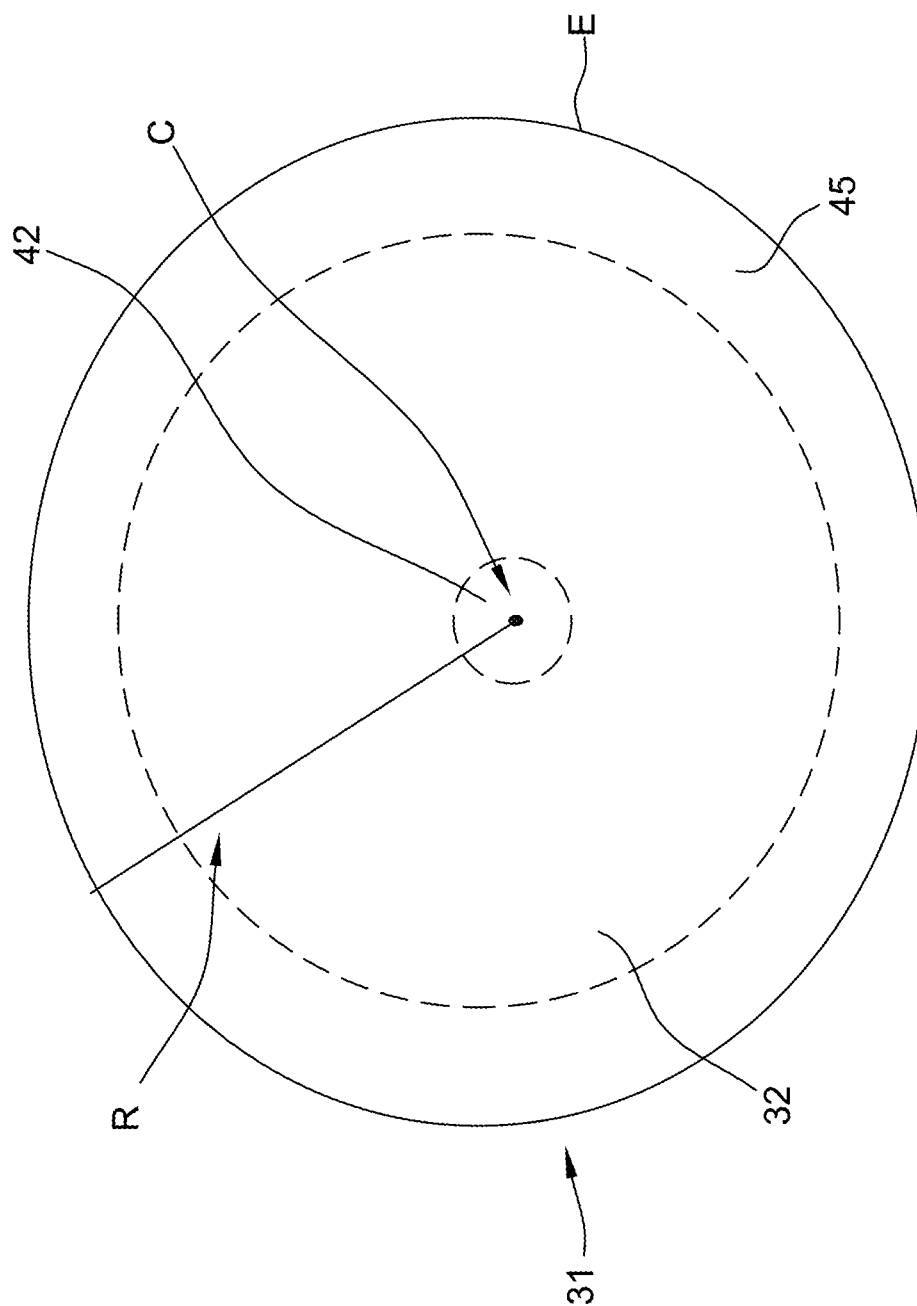


FIG. 7

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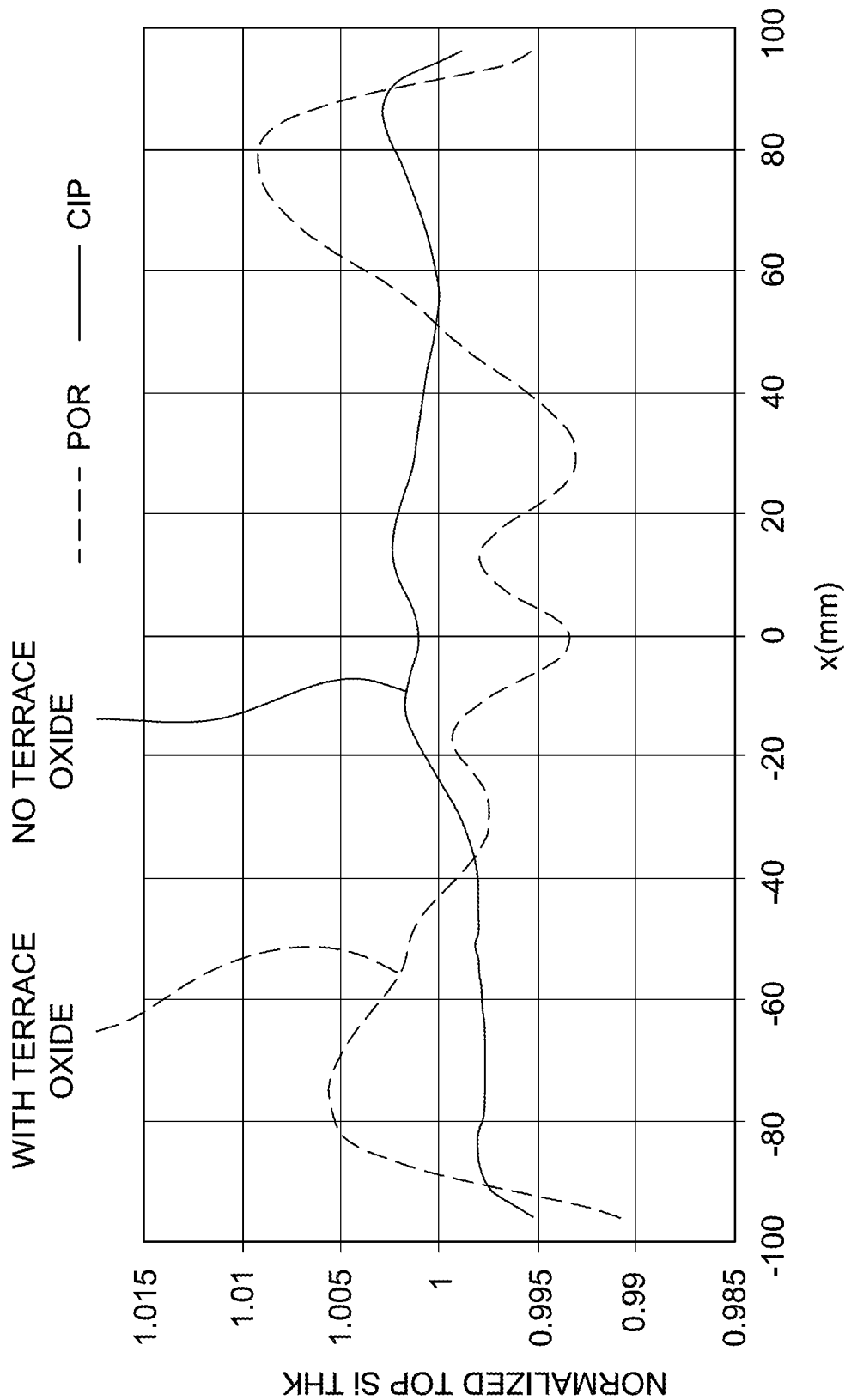


FIG. 8

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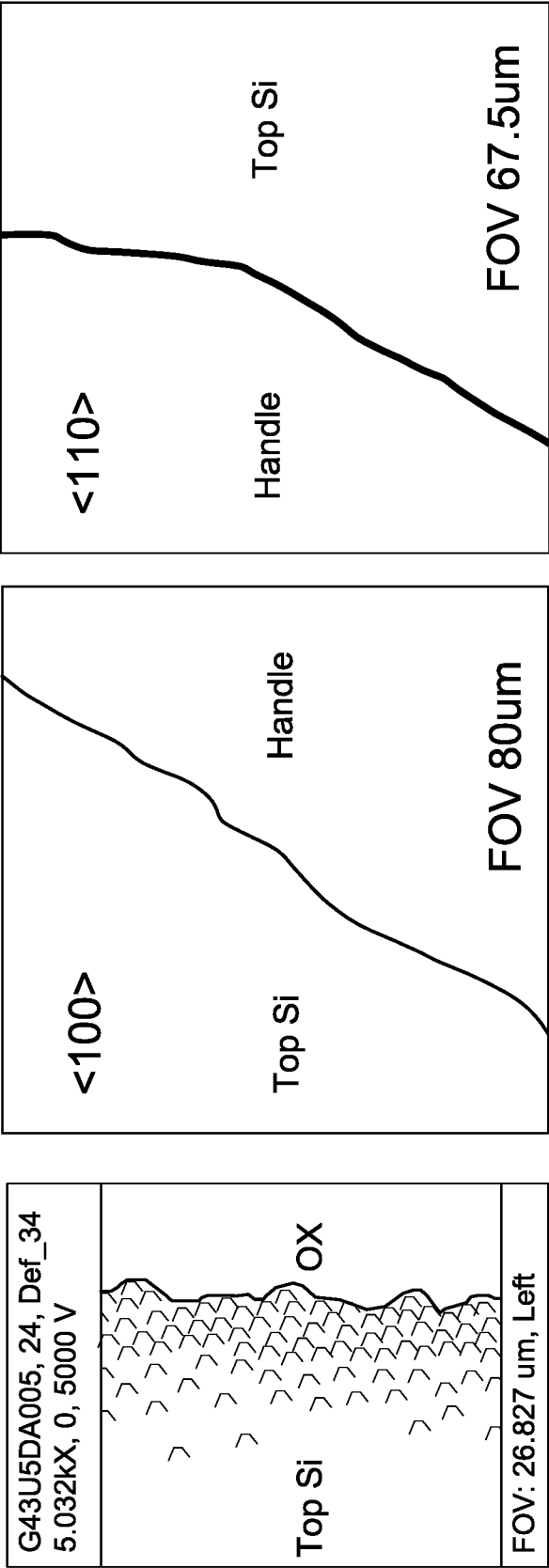


FIG. 9

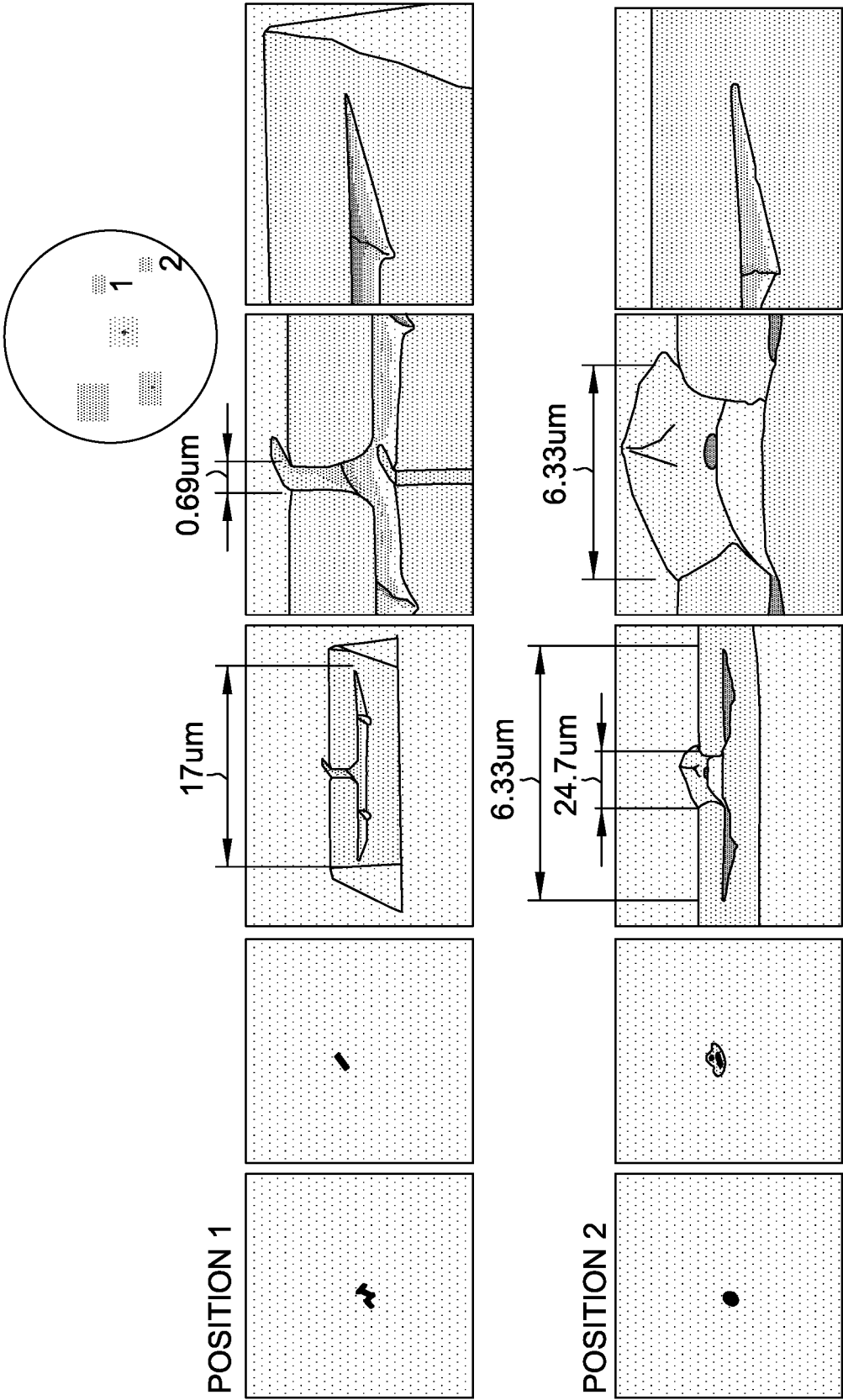
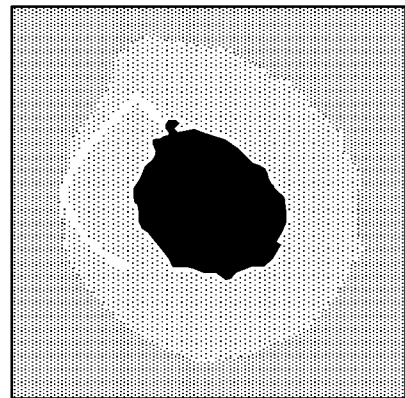
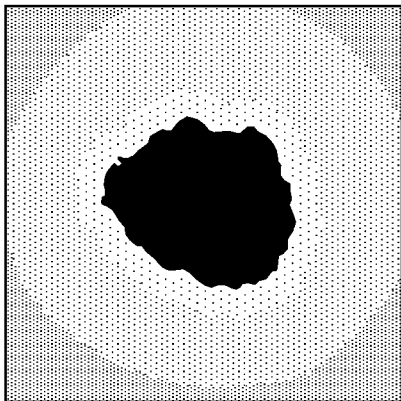


FIG. 10

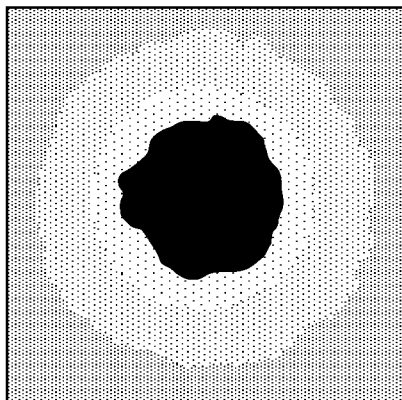
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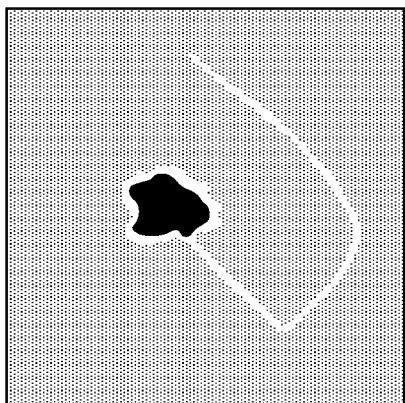
Scope:SEM
Vacc: 5000V
ID: 1
FOV: 22.427 μ m
Detector: SE
Mag: 6020
Coords (mm):
(110.01, 129.76)



Scope:SEM
Vacc: 5000V
ID: 60
FOV: 16.841 μ m
Detector: SE
Mag: 8016
Coords (mm):
(120.62, 34.170)



Scope:SEM
Vacc: 5000V
ID: 278
FOV: 22.566 μ m
Detector: SE
Mag: 5983
Coords (mm):
(171.30, 161.45)



Scope:SEM
Vacc: 5200V
ID: 414
FOV: 11.241 μ m
Detector: SE
Mag: 12010
Coords (mm):
(124.06, 174.70)

FIG. 11

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Standard Process (Center Only)

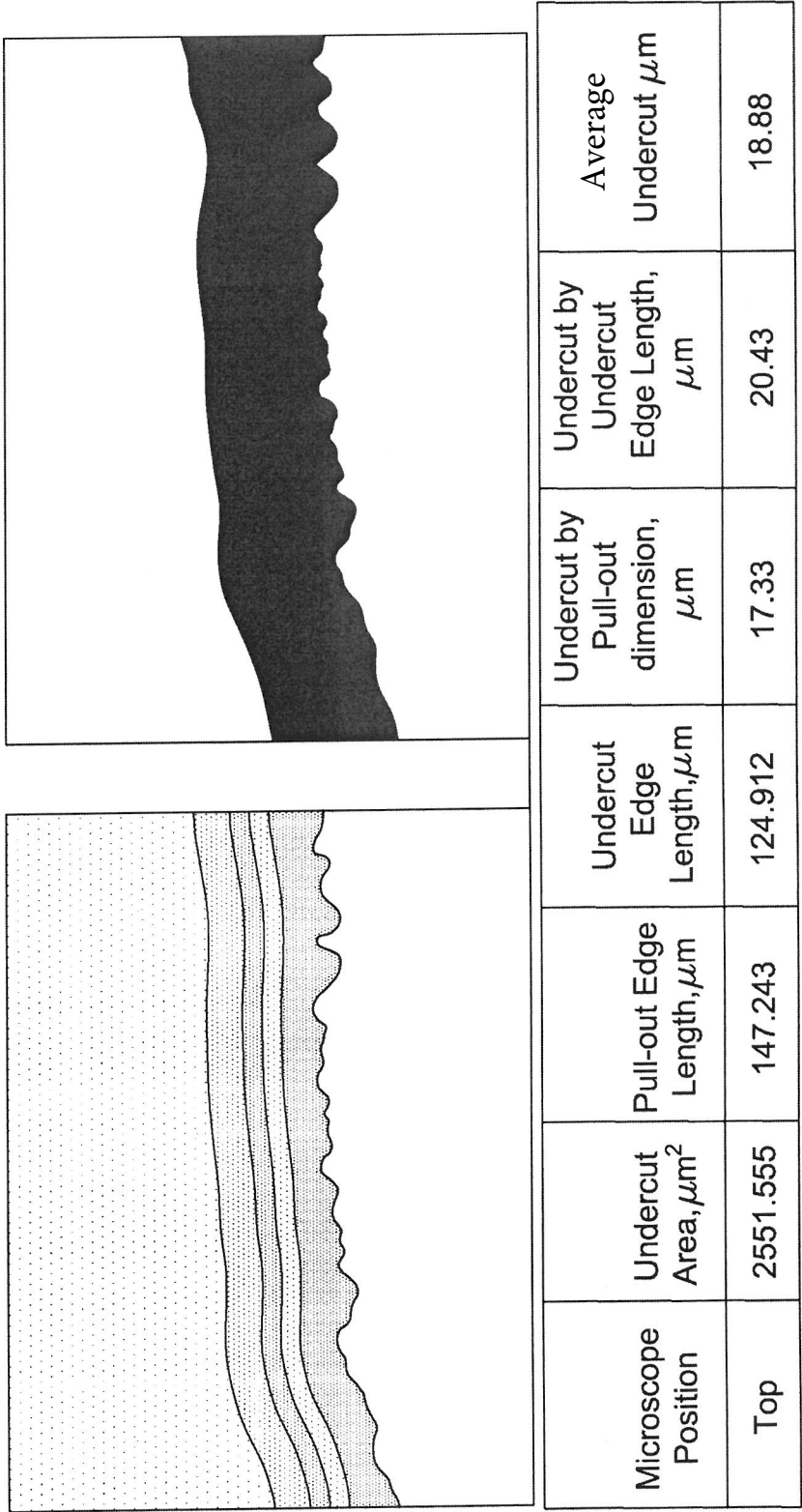
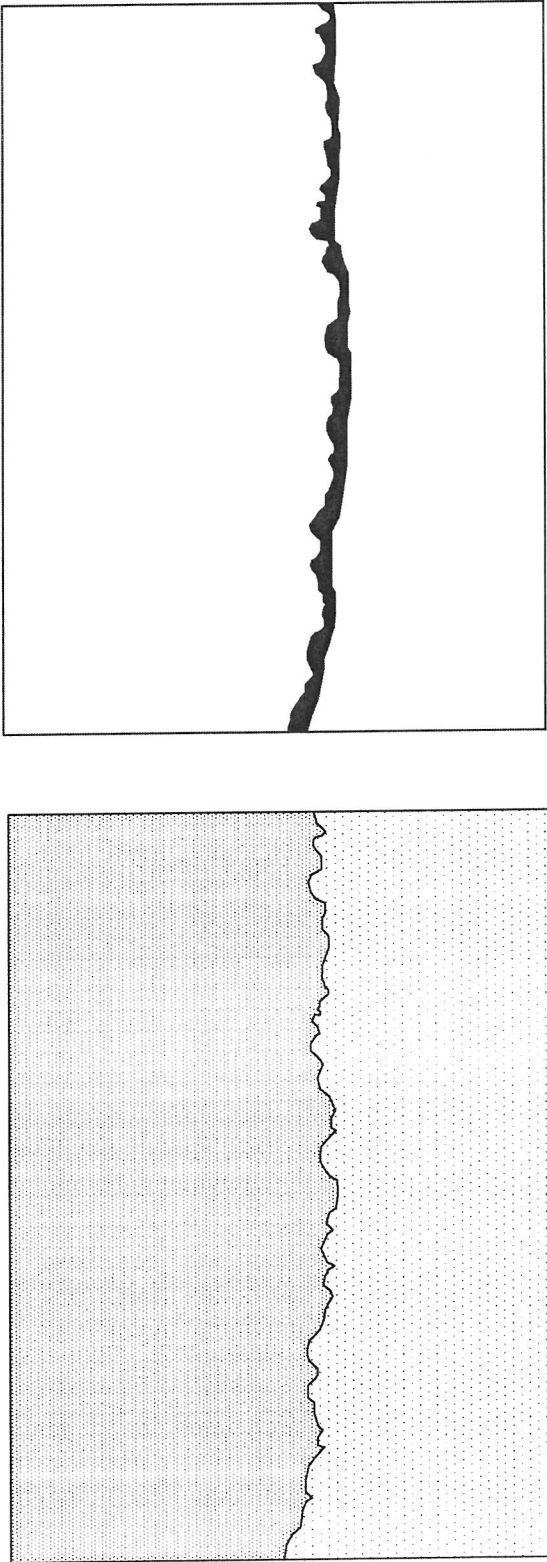


FIG. 12A

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CE Process (Center Edge)



Microscope Position	Undercut Area, μm^2	Pull-out Edge Length, μm	Undercut Edge Length, μm	Undercut by Pull-out dimension, μm	Undercut by Undercut Edge Length, μm	Average Undercut μm
Bottom	343.331	141.028	127.037	2.40	2.70	2.55

FIG. 12B

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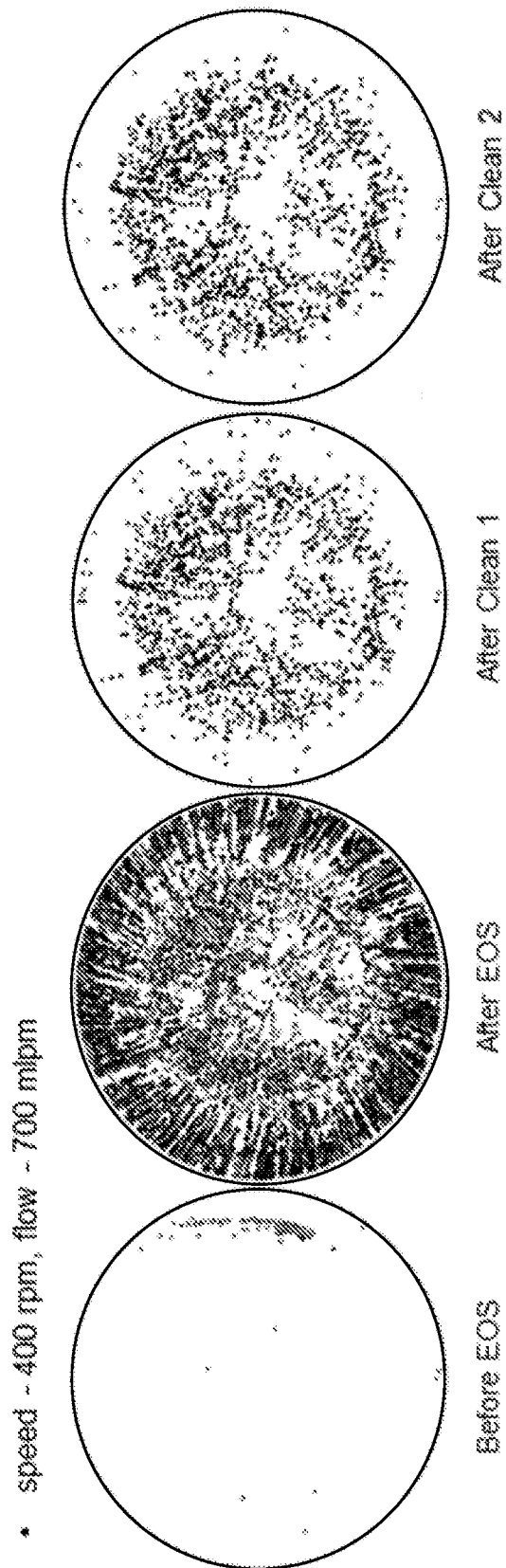


FIG. 13

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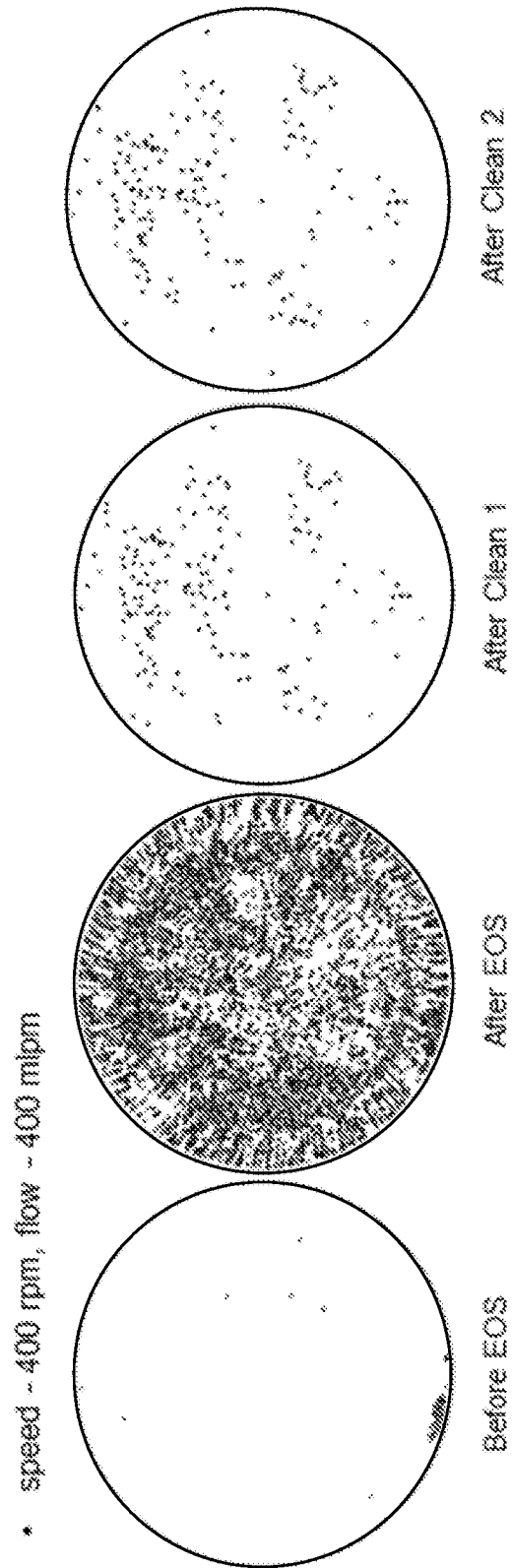


FIG. 14

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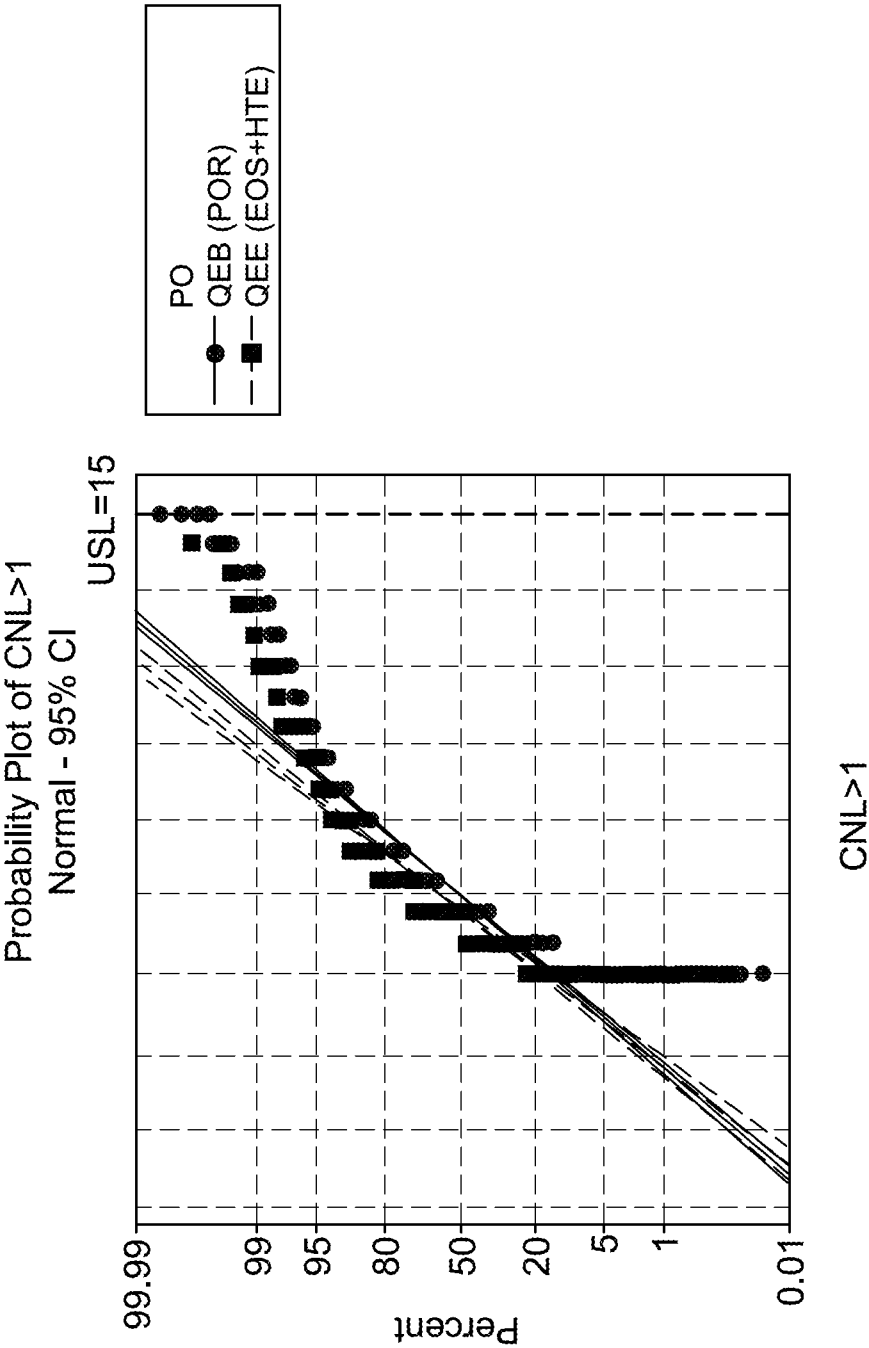


FIG. 15

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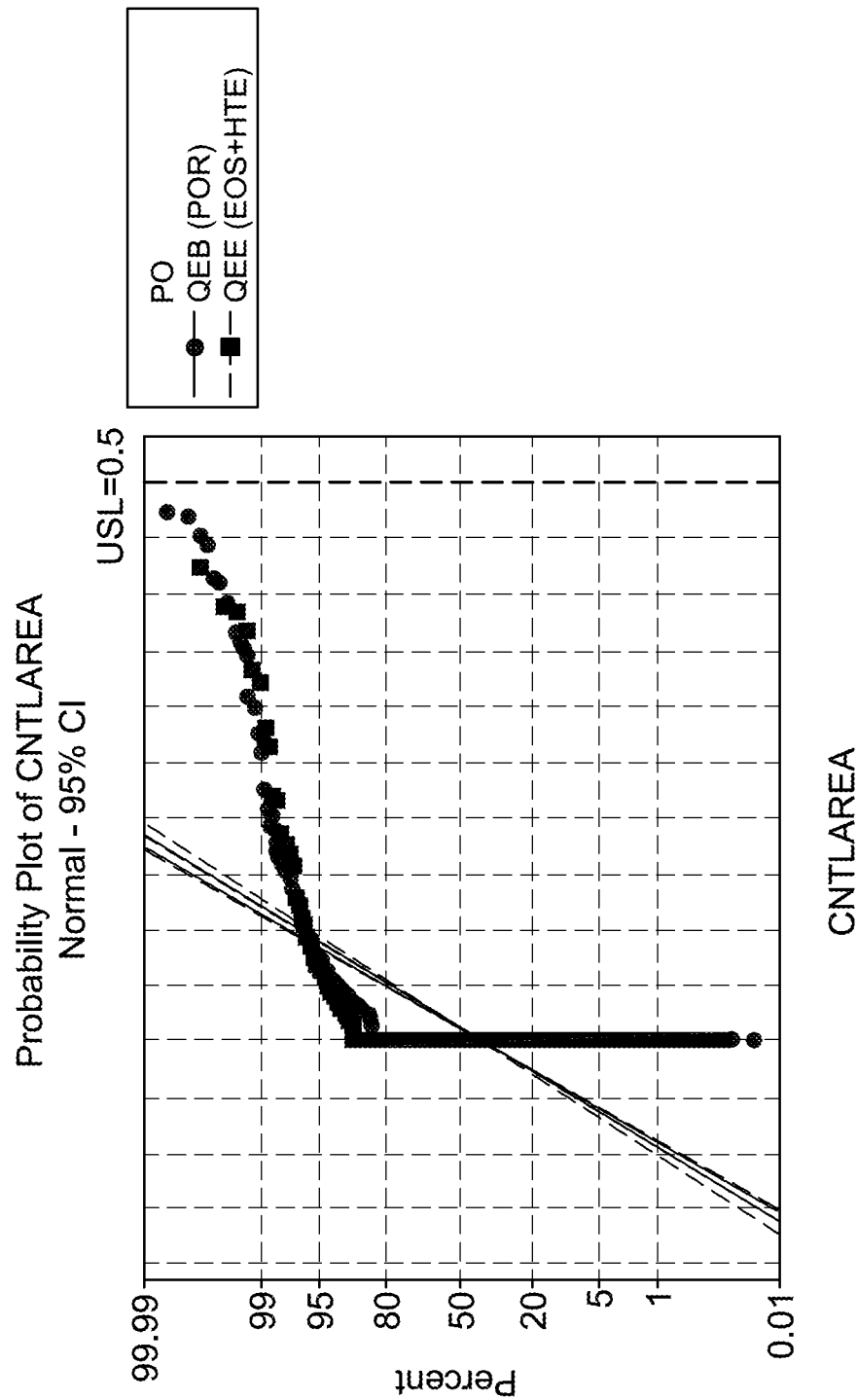


FIG. 16

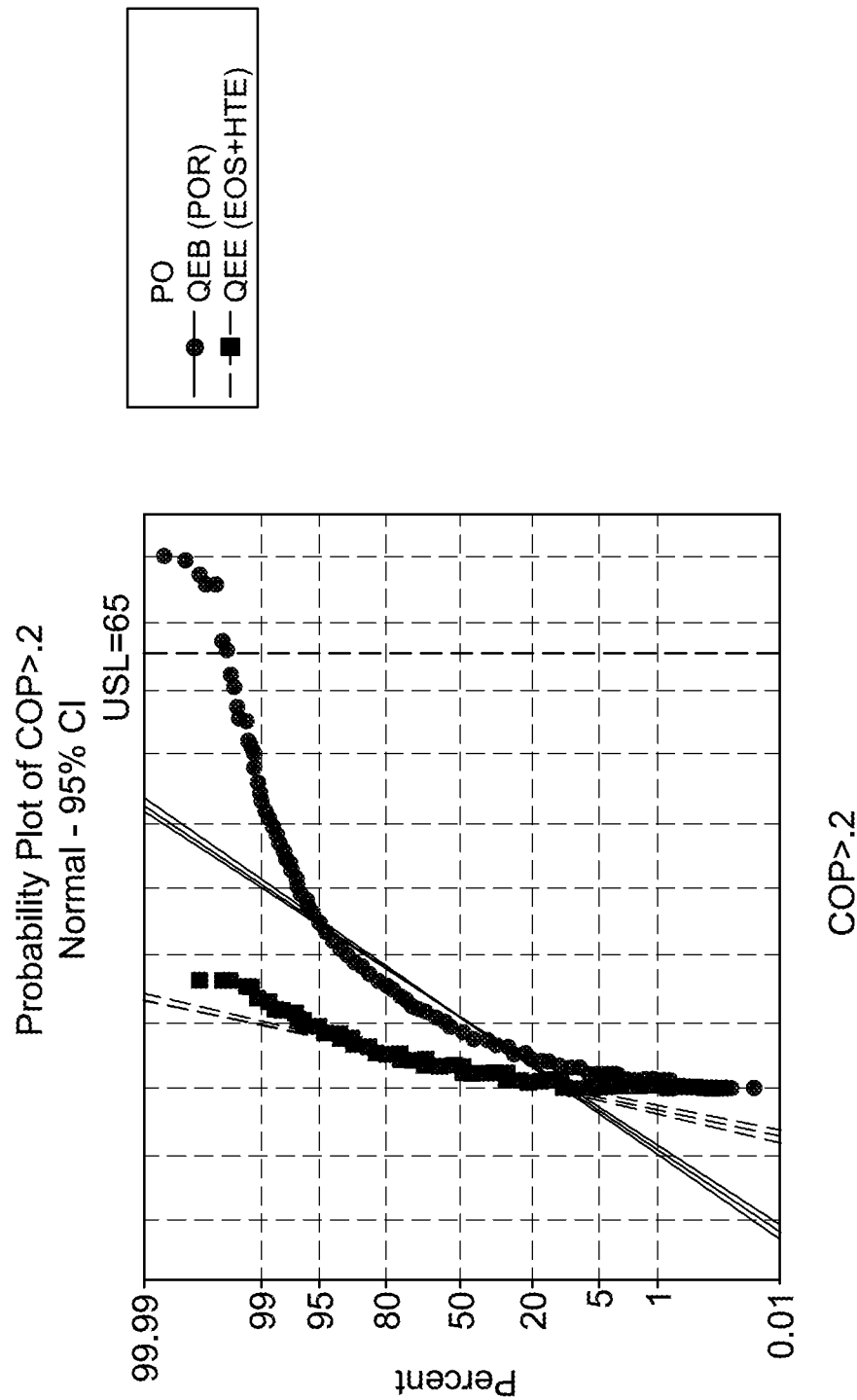


FIG. 17

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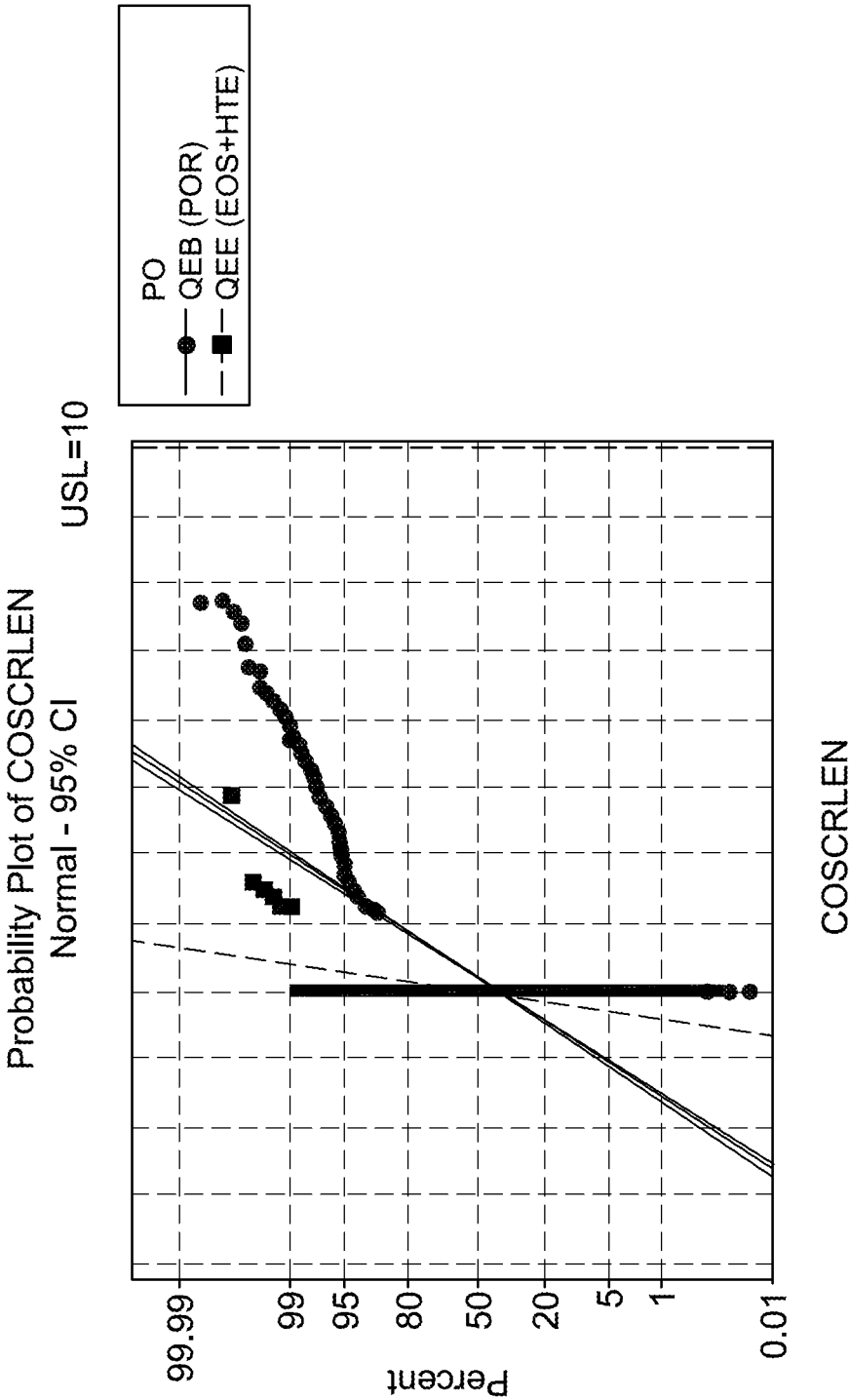


FIG. 18

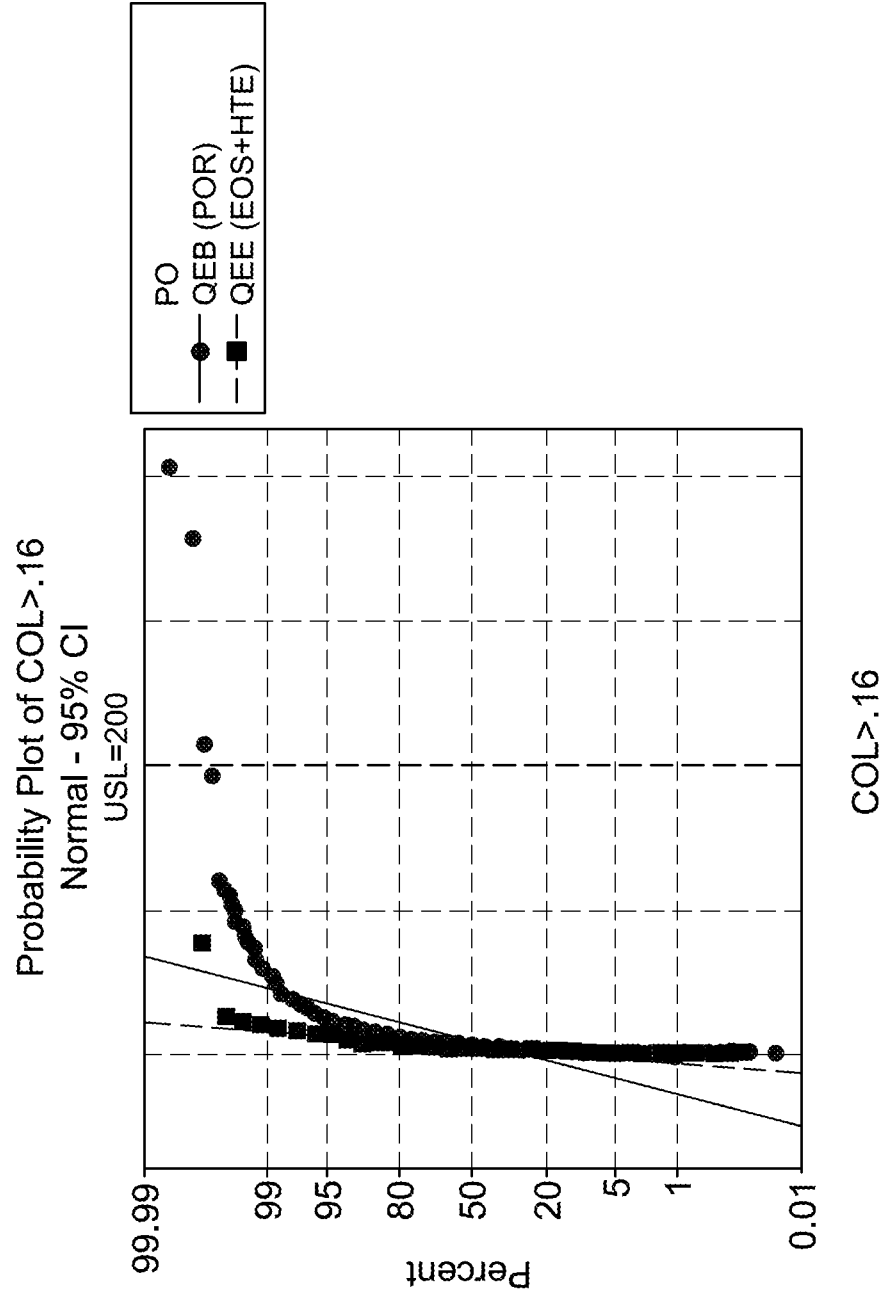


FIG. 19

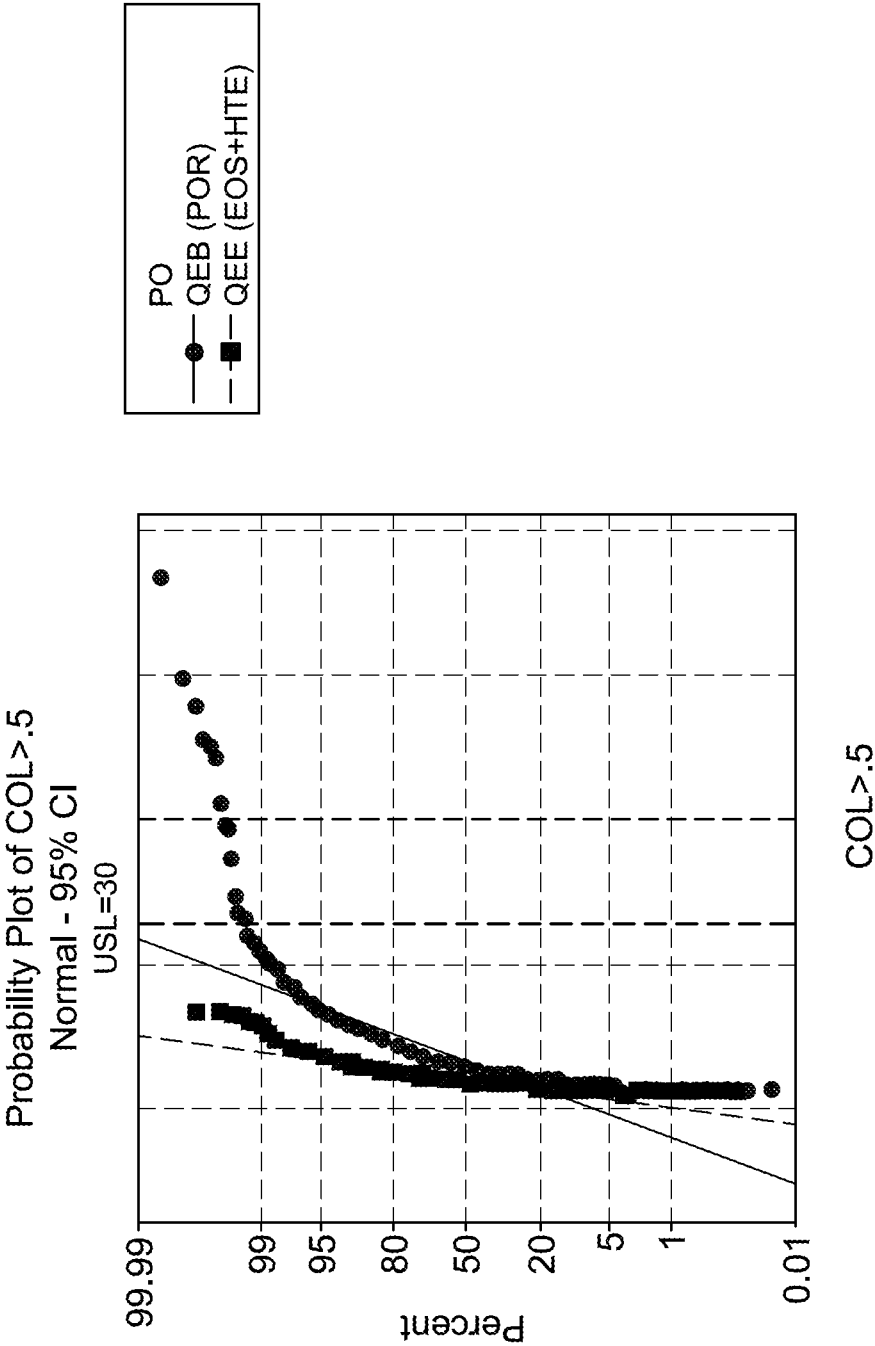


FIG. 20

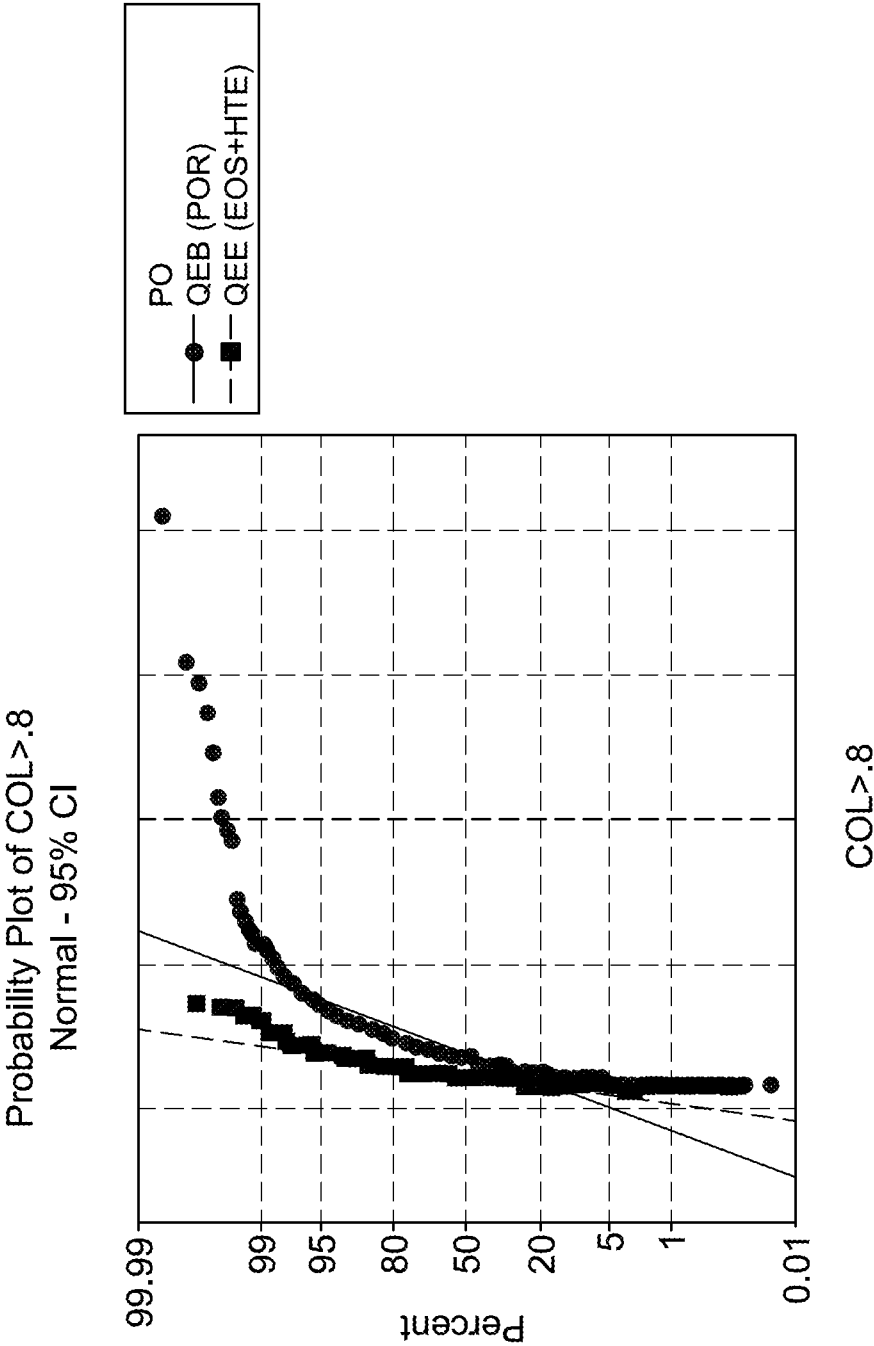


FIG. 21

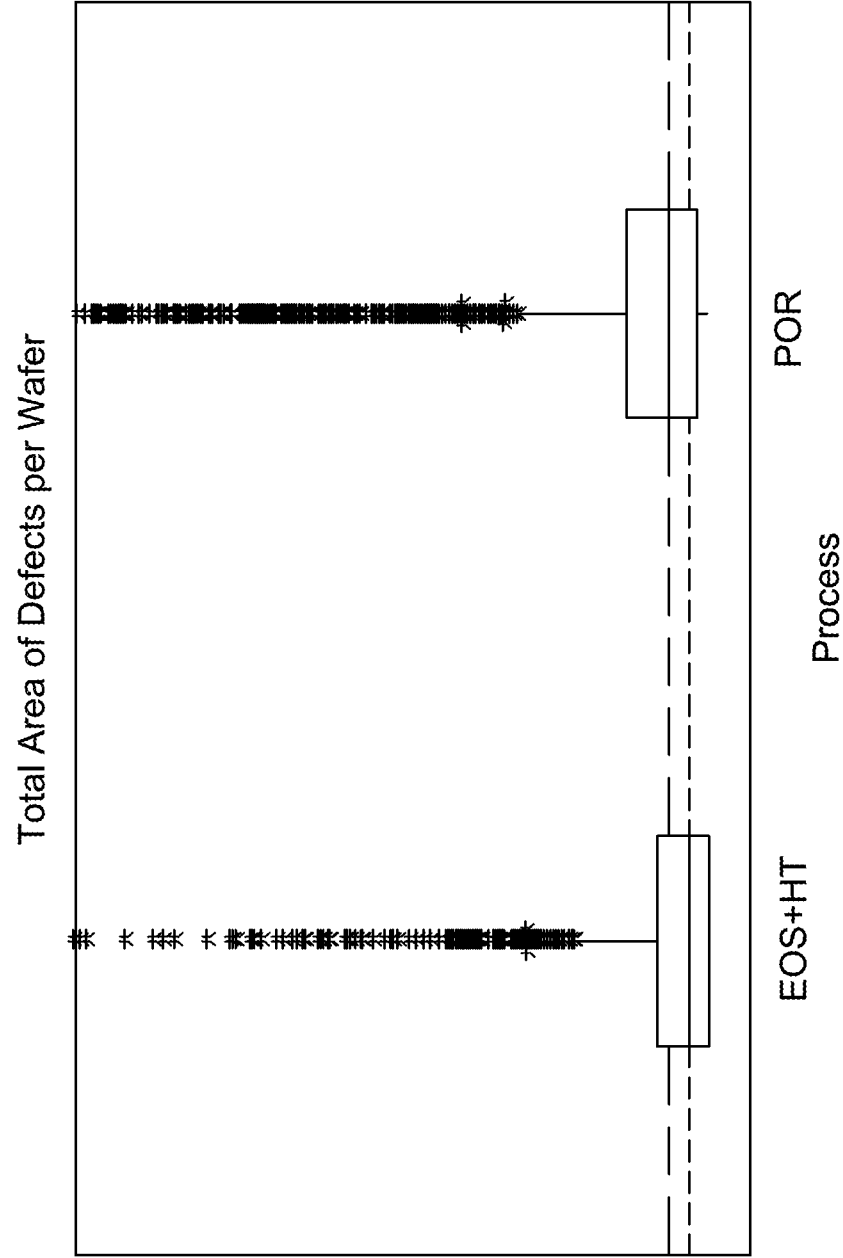


FIG. 22

Defect Count per Wafer 0.8 micron or Larger

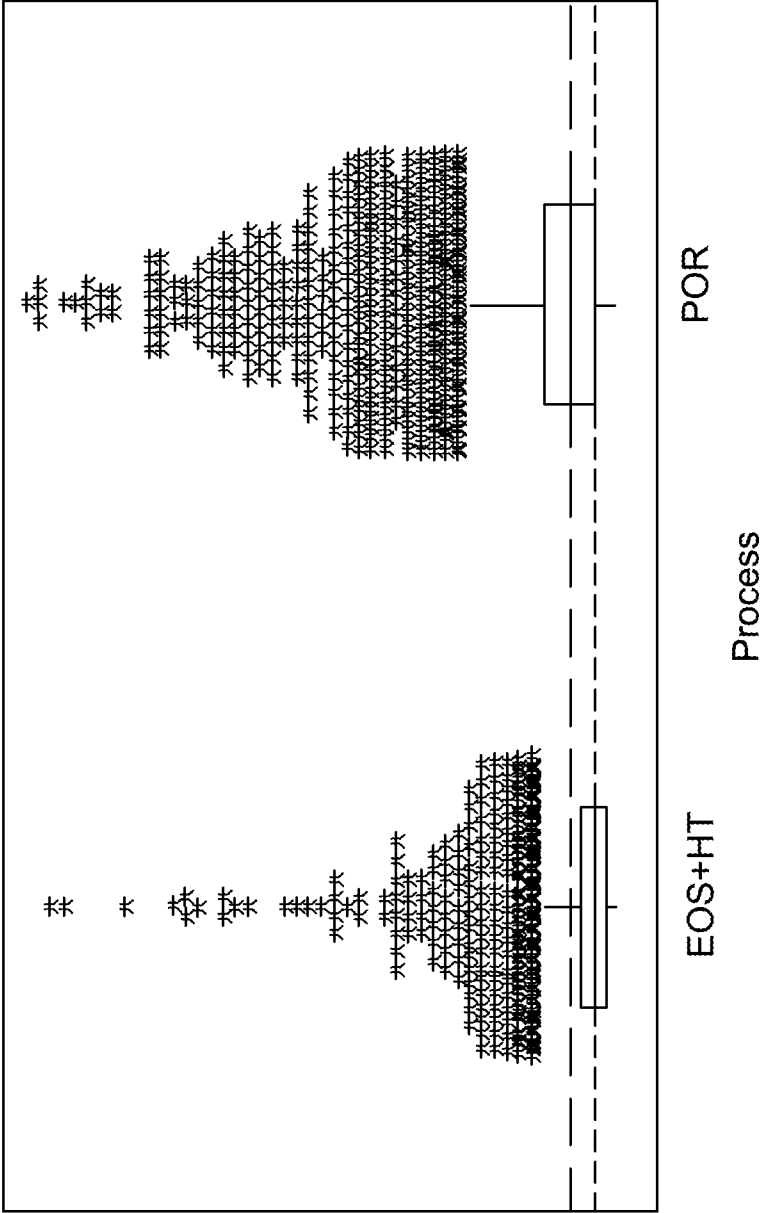


FIG. 23