

Systems and Methods For Analyzing Cutaneous Conditions

17004948

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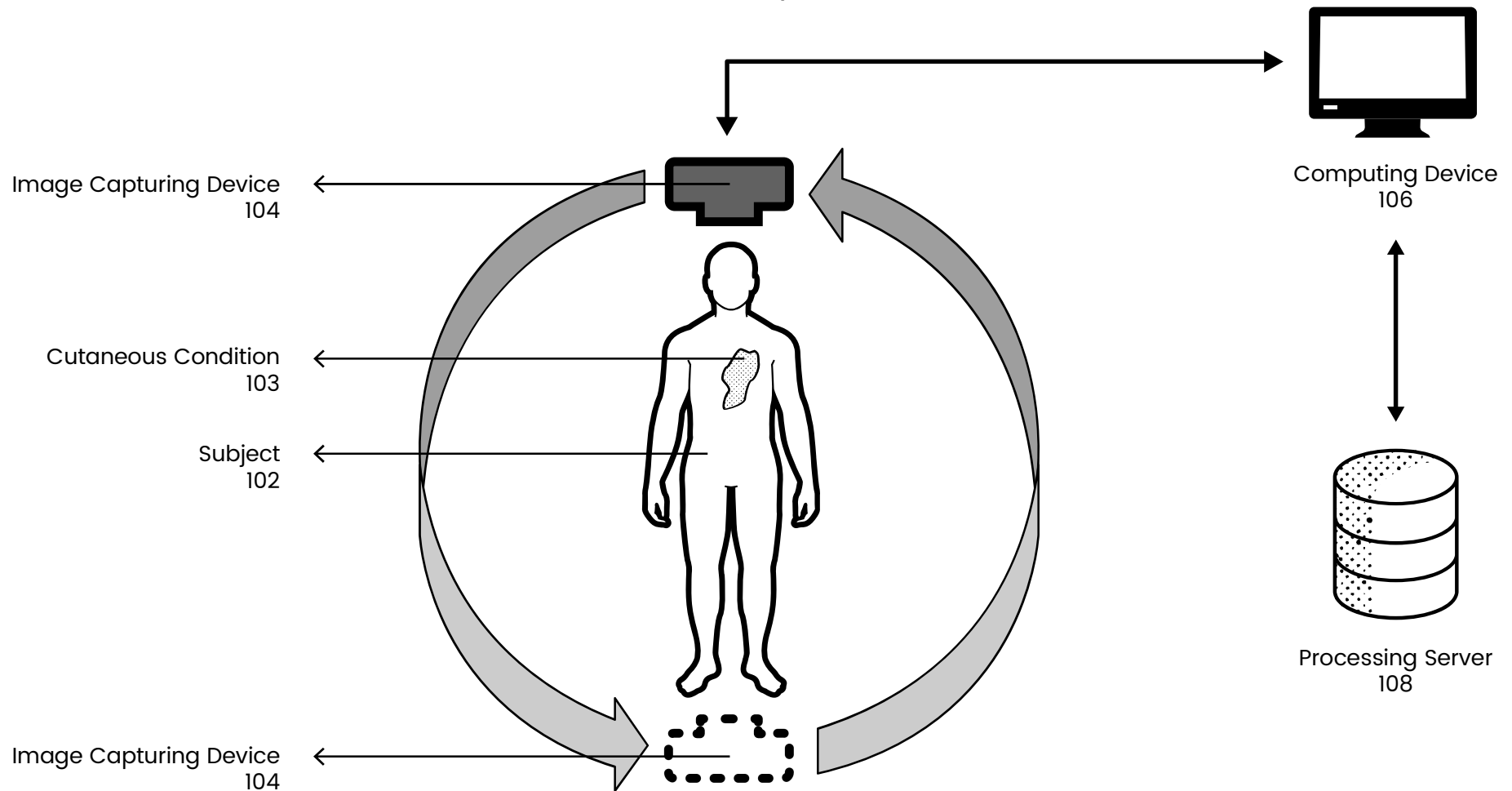


FIG. 1

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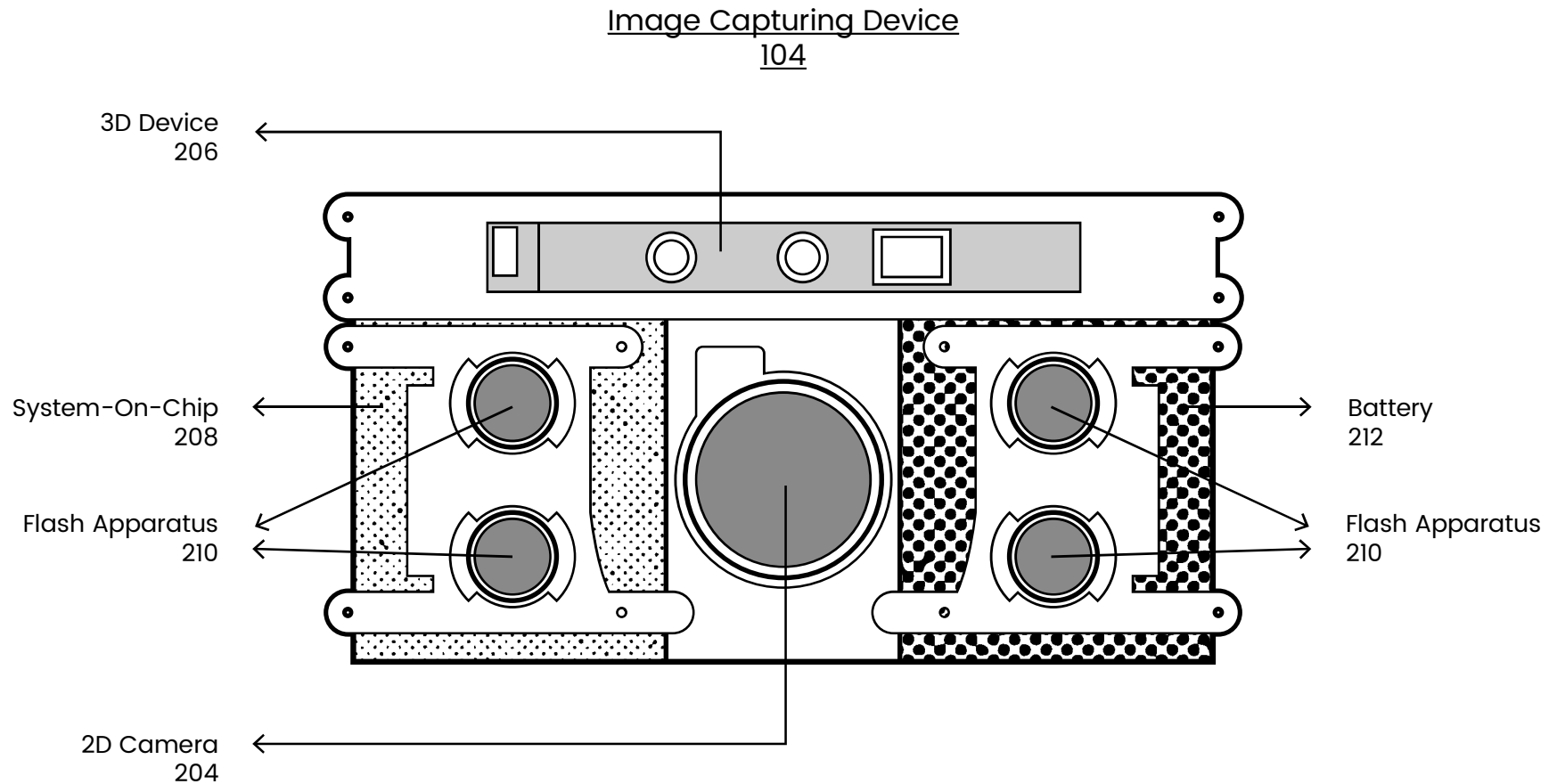


FIG. 2

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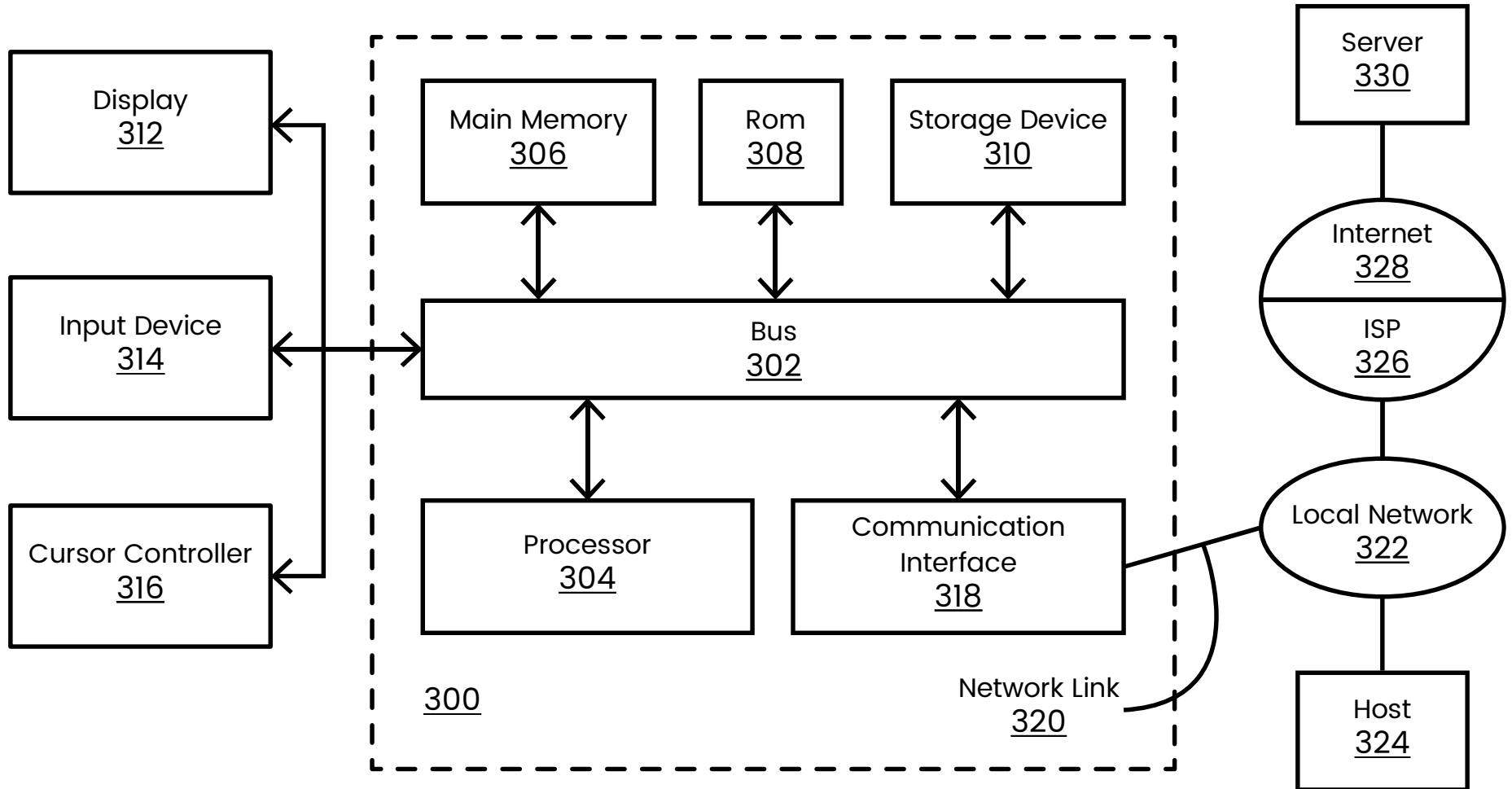


FIG. 3

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Receive a 2D image of a cutaneous condition and a set of 3D point clouds associated with the 2D image using a computing device.

402



Generate a 3D surface according to the set of 3D point clouds using the computing device.

404



Receive a depth map for the 2D image based on the 3D surface using the computing device, such that the depth map comprises depth data for each pixel of the 2D image.

406



Analyse the cutaneous condition using the 2D image and the depth map using the computing device.

408

FIG. 4

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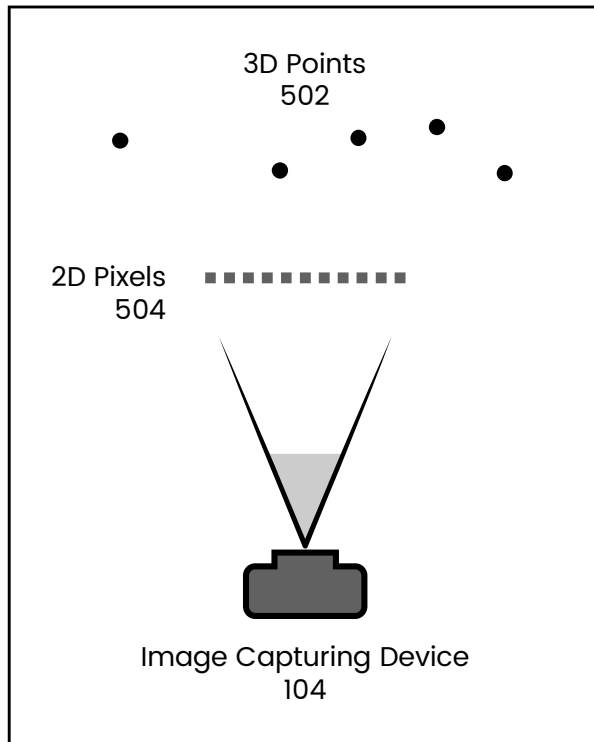


FIG. 5A

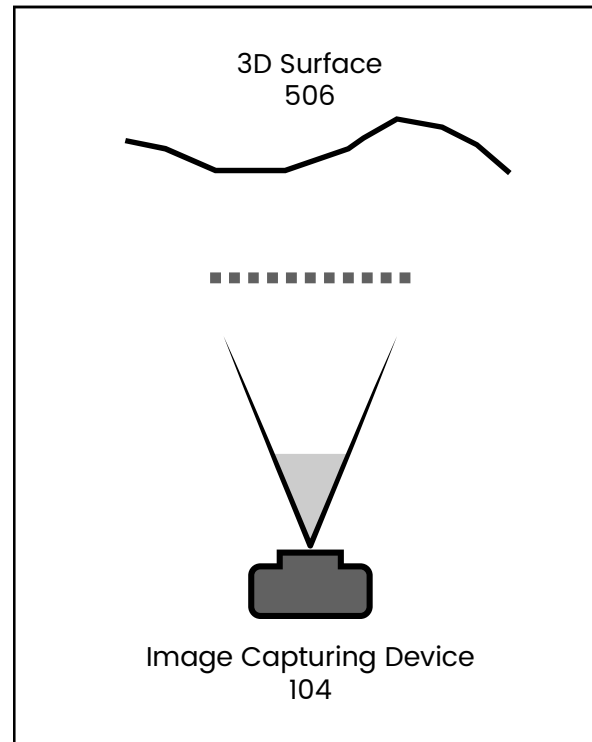


FIG. 5B

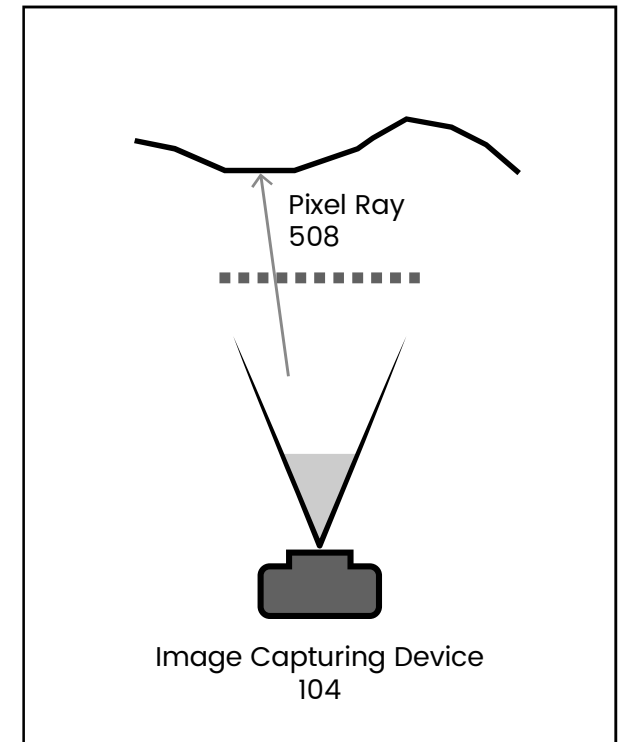


FIG. 5C

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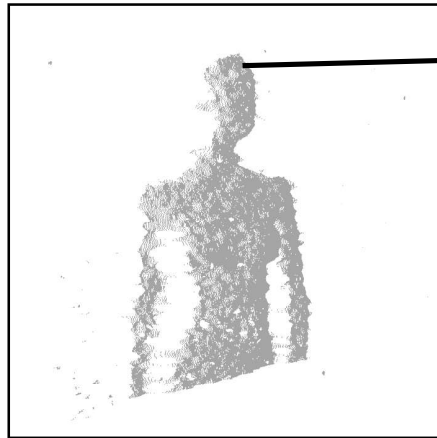


FIG. 6A

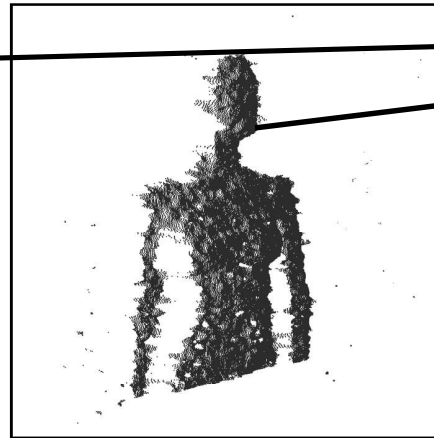


FIG. 6B

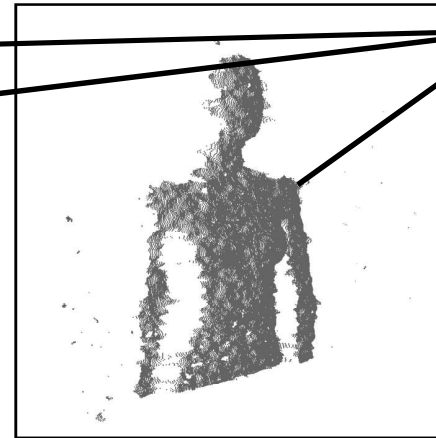


FIG. 6C

Input set of 3D
point clouds
602

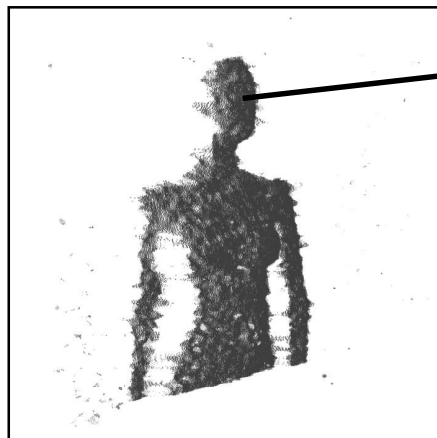


FIG. 6D

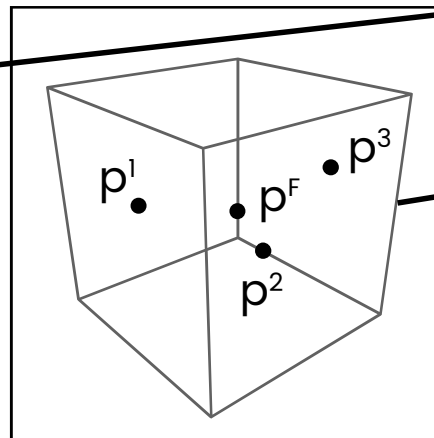


FIG. 6E

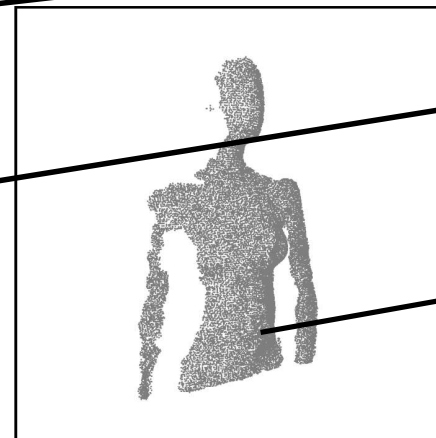


FIG. 6F

Composite 3D
point cloud
604

Voxel-neighbour
positioning
606

Filtered 3D
point cloud
608

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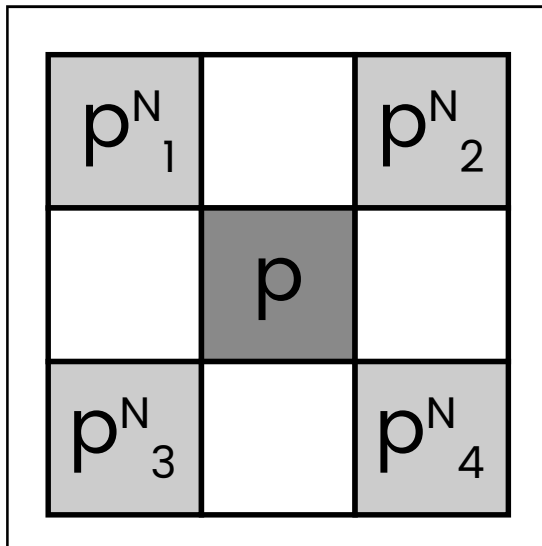


FIG. 7A

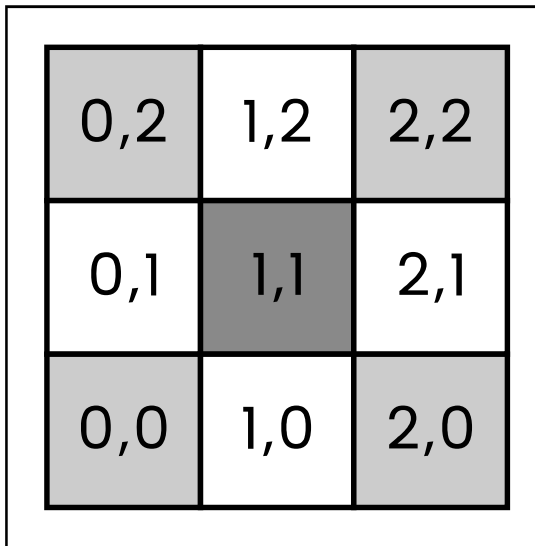


FIG. 7B

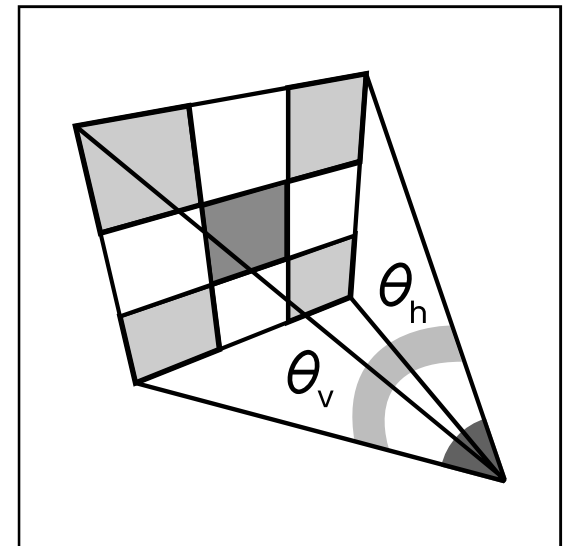


FIG. 7C

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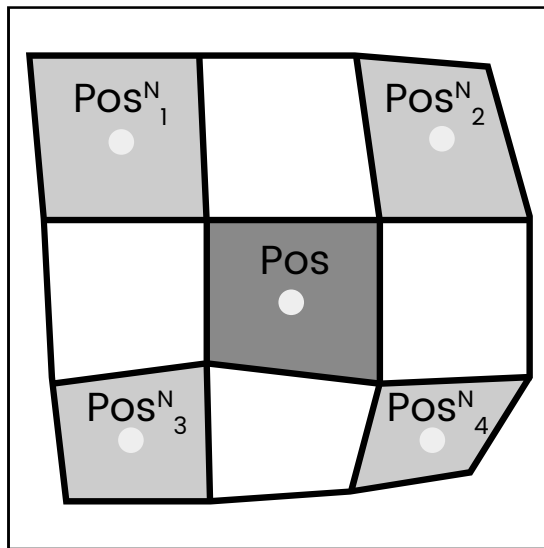


FIG. 8A

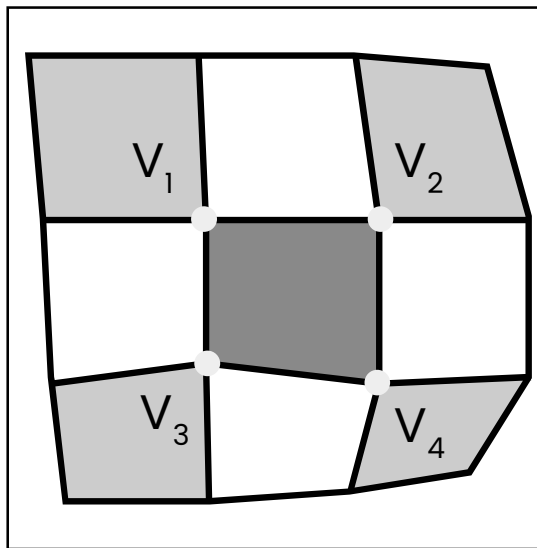


FIG. 8B

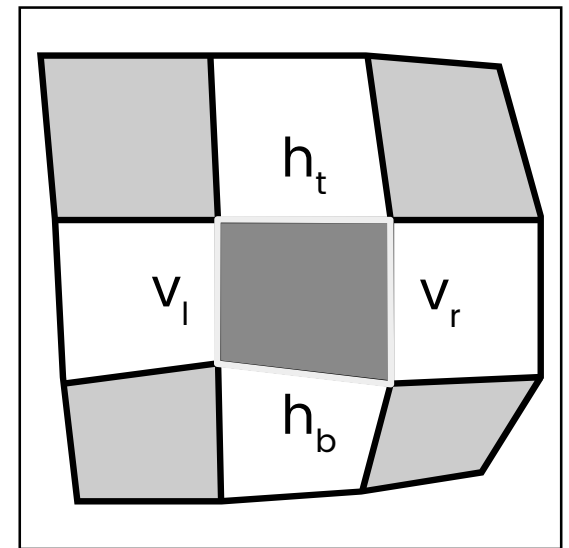


FIG. 8C

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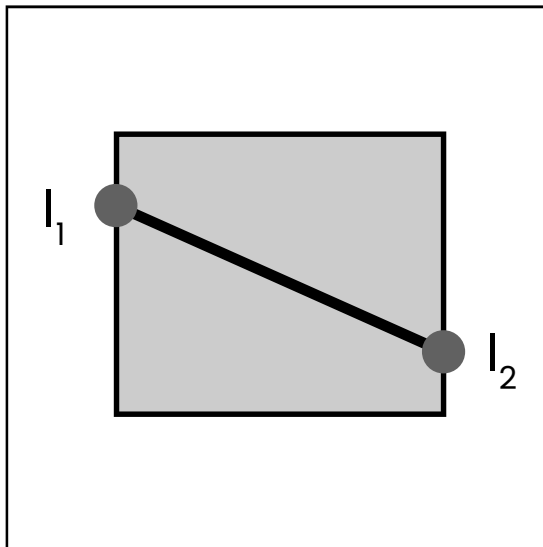


FIG. 9A

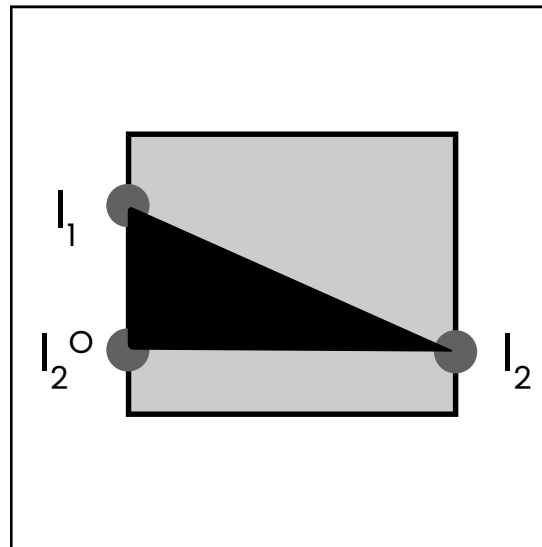


FIG. 9B

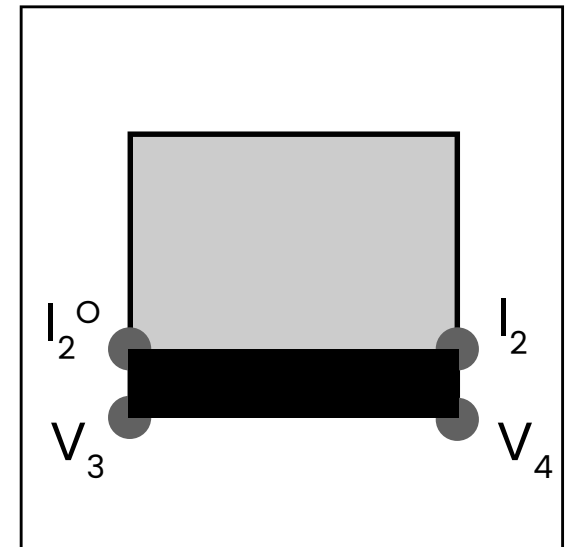


FIG. 9C

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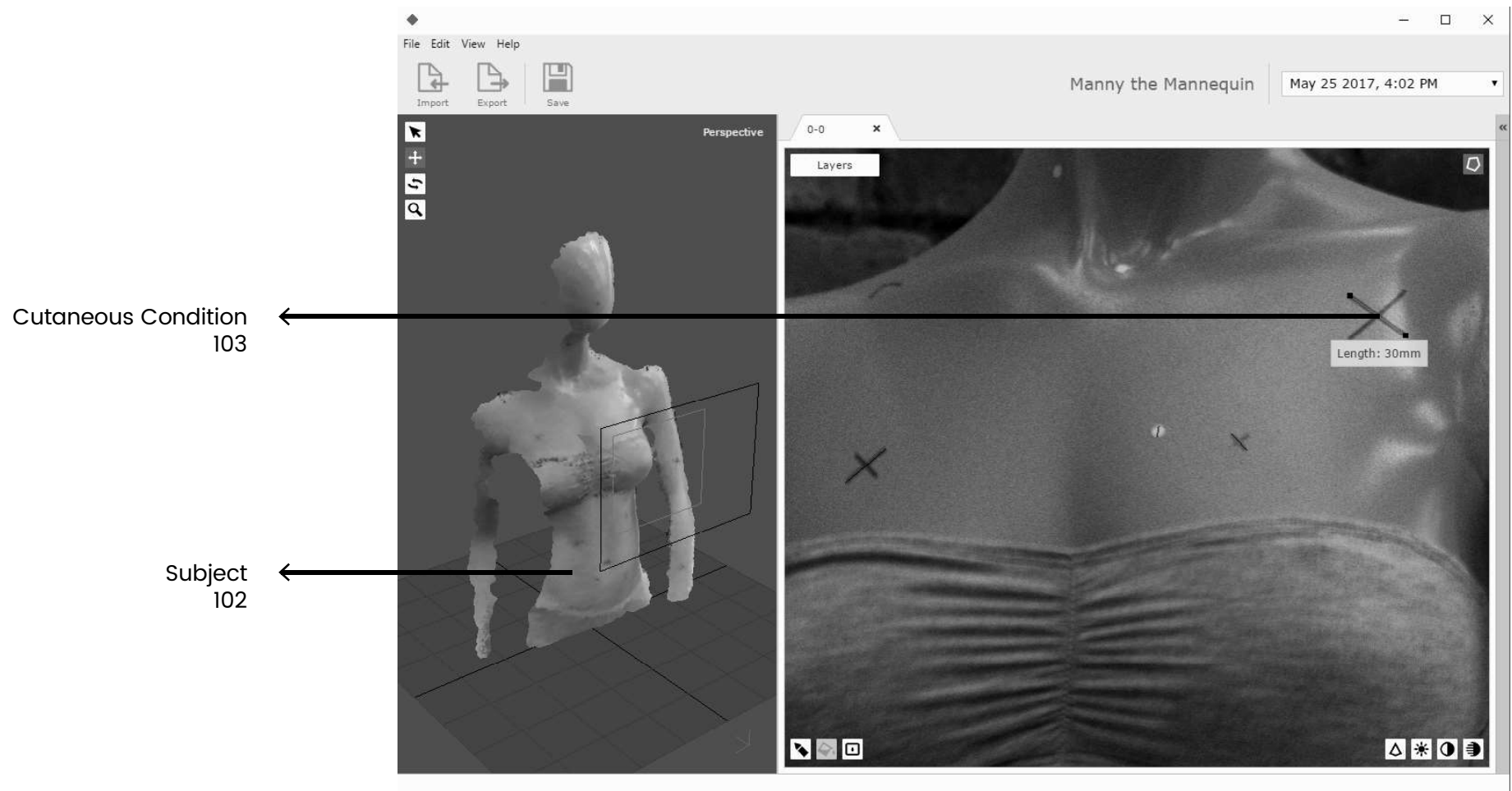


FIG. 10