

SEMI D20-0706 (Reapproved 0815) TERMINOLOGY FOR FPD MASK DEFECT

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1 Purpose

1.1 This Document defines defect terminology for FPD masks. By this Standard, it is intended that the concepts of terms which should be used at the technical conferences, business discussion, etc. are clarified and that standardization as to masks will be promoted.

2 Scope

2.1 These terms apply to photomasks that are principally used in fabricating flat panel display.

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3 Referenced Standards and Documents

3.1 None.

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

4 Definitions

4.1 *bridge* — an extension of chrome which connects completely and continuously from an edge to another edge.

4.2 *bubble* — void in the interior of the glass substrate.

4.3 *chipping* — chipping of edge of the glass caused by cutting or treatment.

4.4 *edge roughness* — subtle roughness and/or jagged zone on the pattern edge.

4.5 *flaw*

4.5.1 *scratch* — relatively thick and deep linear friction defect on the surface of the glass.

4.5.2 *sleek* — extremely thin and light linear friction defect on the surface of the glass.

4.5.3 *pit* — small dot-shaped depression on the surface of the glass.

4.6 *foreign substance*

4.6.1 *particle* — relatively high foreign substance attached on the surface of the substrate.

4.6.2 *contamination* — cluster of relatively small substances attached on the surface of the substrate in the shape of thin film.

4.7 *intrusion* — an absence of chrome extending inward from boundary.

4.8 *missing pattern image* — complete disappearance of the designed chrome-pattern.

4.9 *pattern disconnect* — an intrusion which completely separates the continuity of the chrome-pattern.

4.10 *pin hole* — a small hole-shaped opening defect on the chrome-pattern.

4.11 *protrusion* — an extension of chrome beyond the desired boundary.

4.12 *round of corner* — unintended round on the pattern corner.

4.13 *spot* — isolated chrome residue on the etched area.

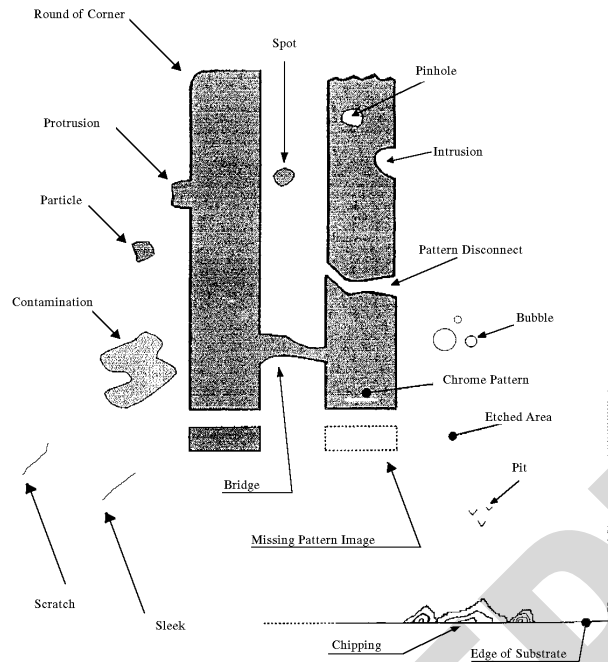


Figure 1
Image of Defects for FPD Mask

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