Series of printed optical diffraction images and masks referenced as "Optical diffr. from masks increasing number of units"

Contributors

Fuller, Watson, 1935-

Publication/Creation

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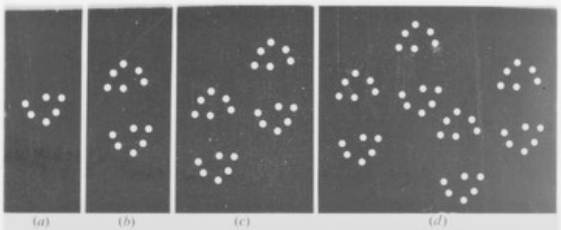
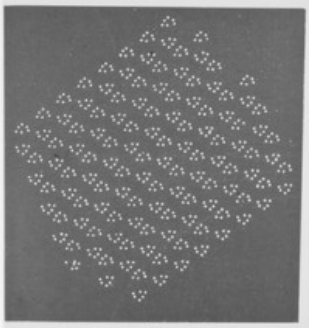


(a) (b) (c) (d)



(e)

7 Masks used for the optical transforms of the preceding pages

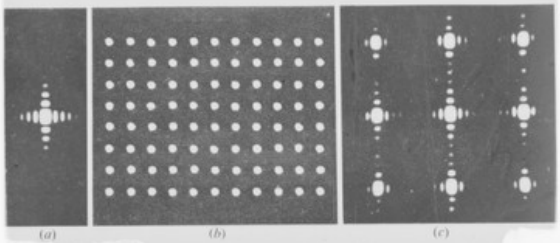
(a) Mask for **1**

(b) Mask for **2**

(c) Mask for **4**

(d) Mask for **5**

(e) Mask for **6**



(a) (b) (c)

8 (a) Optical diffraction pattern of a rectangular aperture. (b) Mask representing the product of a lattice function with a function representing the aperture of **7** *a*. (c) Optical diffraction pattern of mask shown in **8** *b*

APPENDIX

SOME RELATIONSHIPS
ALCULATED TRANSFORM
IE OPTICAL TRANSFORM
ND THE MAIN TEXT OF

units used for figs. 67, 68 and 69
lculated transforms in Appendix
from the centre of symmetry i
cement of origin number 2 fo
ig. 67(i) should compare with fi
nience in comparison) and 67(ii
ted as 66(ii) for convenience in c
following points from the mai
arison of various figures in the A
effect of the choice of origin
omparing figs. 60, 61, 62 and 63
ight fringes (section 2.9) are sh
ringes are shown by figs. 66(ii) a
evolution of the reciprocal latt
ransform on one unit cell (secti
8 and 69.
ight fringes which could give
oincident with certain reciproc
re shown in fig. 68(ii).
e theorem that the transform of
ions is the product of their separ
comparing figs. 68(i) and 69(ii).
of structure and 69(ii) is the transf
structure with a regular lattice (
e theorem that the transform o
is the convolution of their separ
fig. 70(ii) (Chapter 4).
he change in the 'texture' of a tr
of the object in real space char
by comparing figs. 67, 68 and 69
he effect of the shape of a small c
(section 7.3.1).
he differences in intensity distr
and non-centrosymmetrical str
seen by comparing fig. 66(i) wit