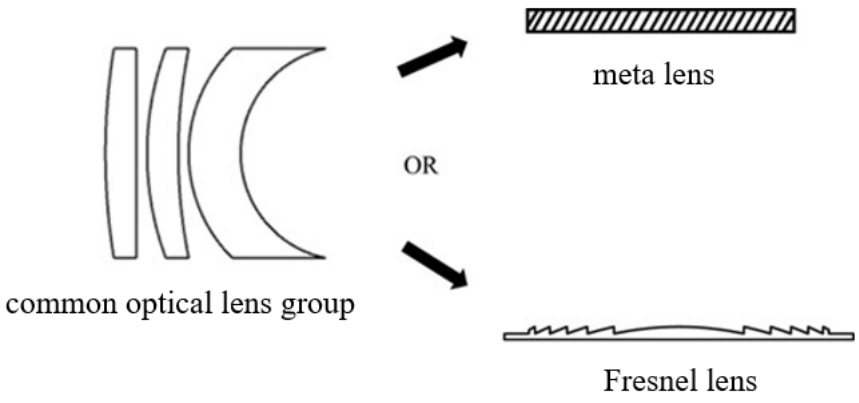

meta lens
OR
common optical lens group
Fresnel lens

FIG. 1

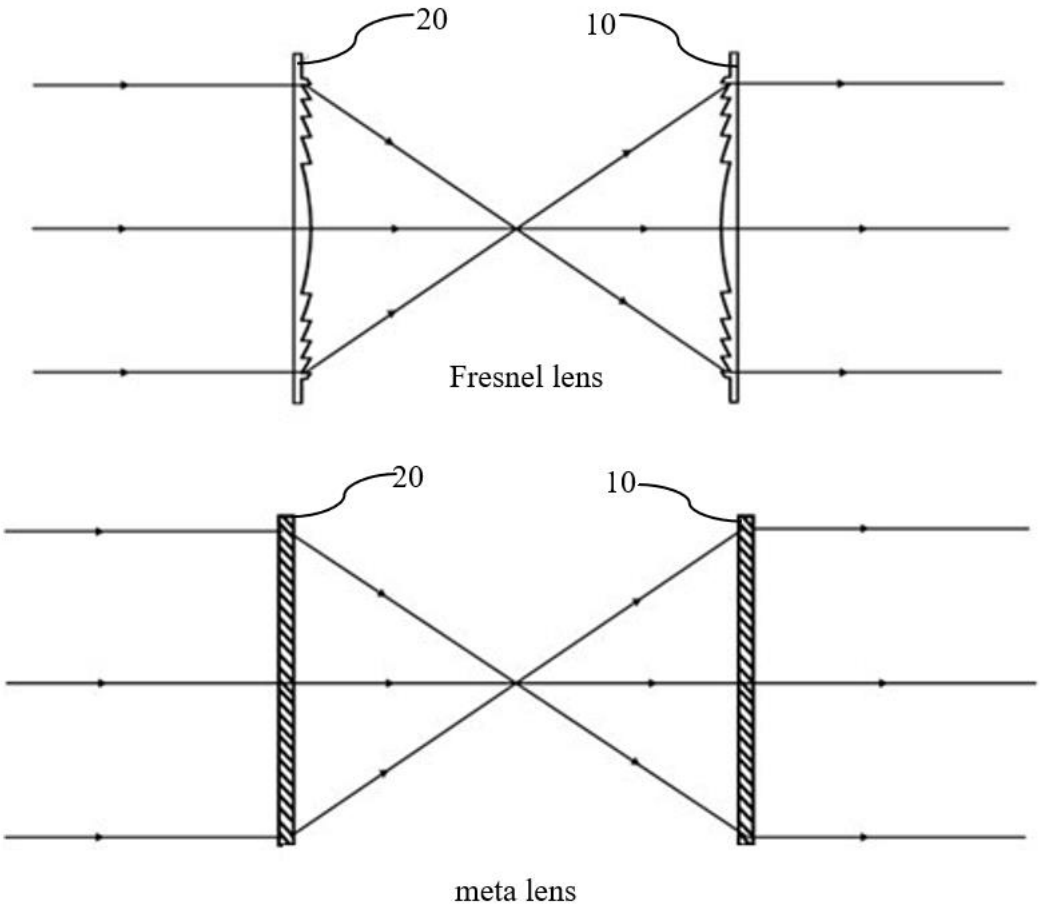

20
10
Fresnel lens
20
10
meta lens

FIG. 2

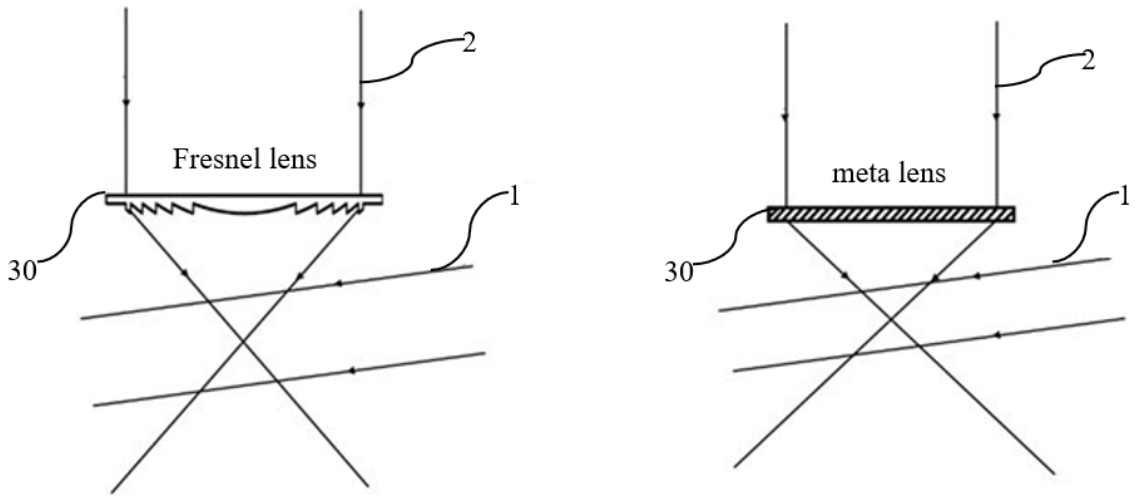

Fresnel lens
2
1
30
meta lens
2
1
30

FIG. 3

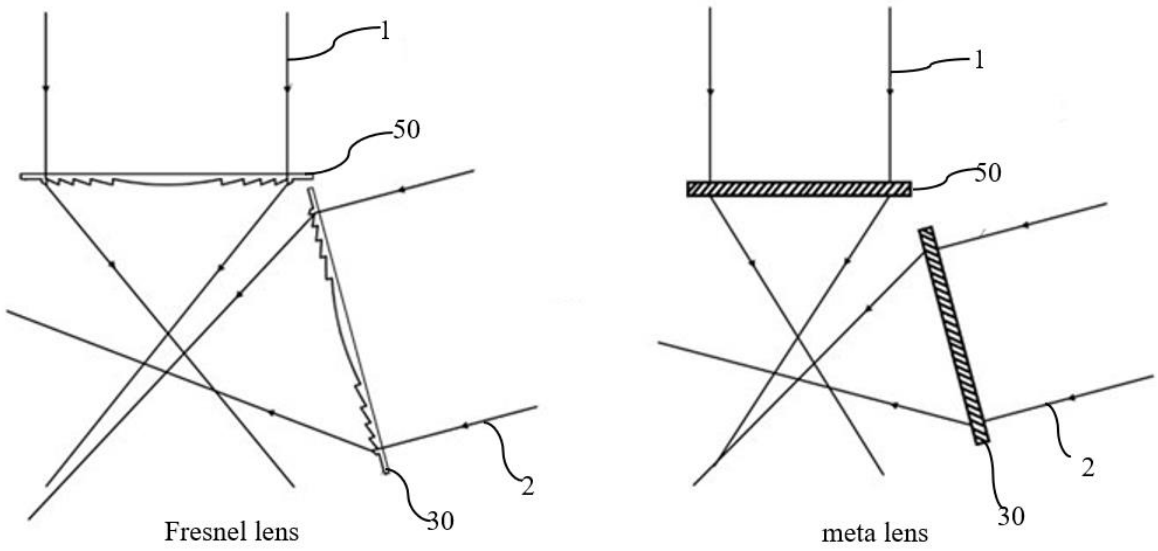

1
50
2
30
Fresnel lens
1
50
2
30
meta lens

FIG. 4

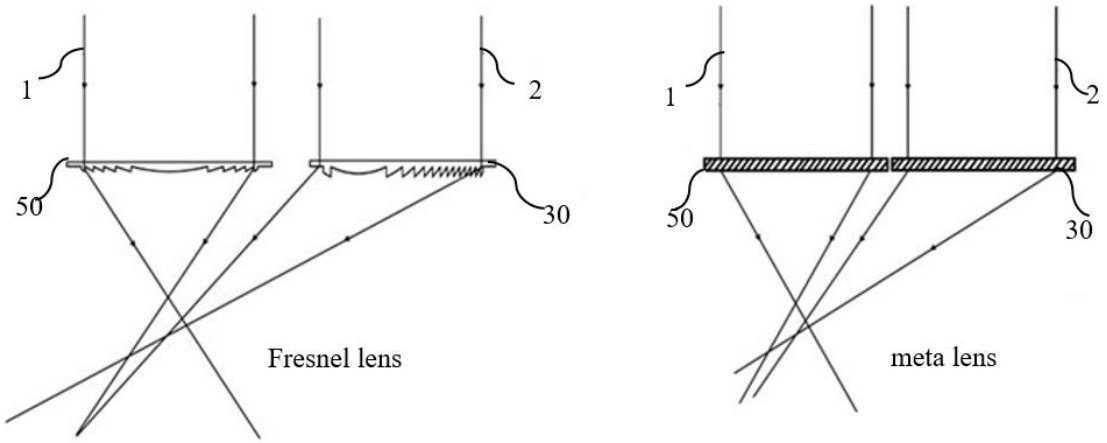

1
2
50
30
Fresnel lens
1
2
50
30
meta lens

FIG. 5

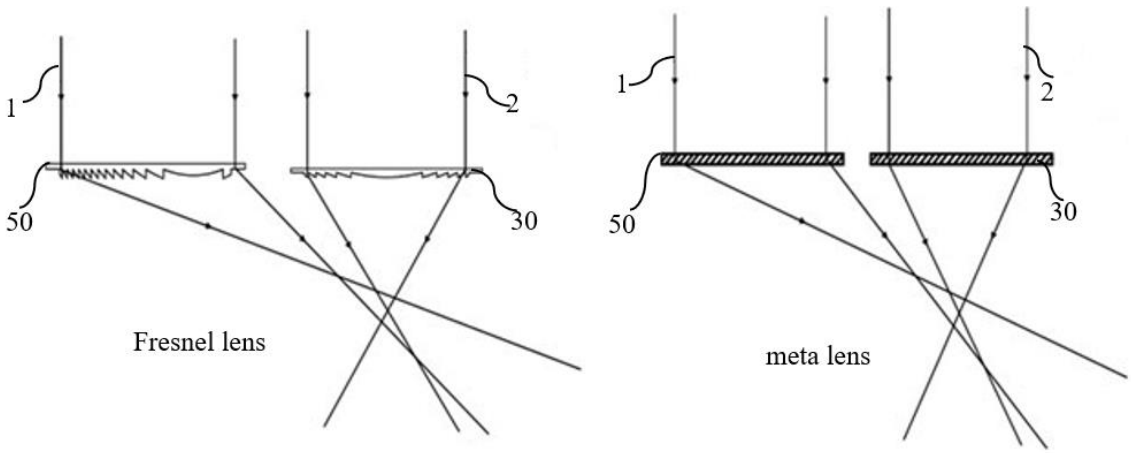

1
2
50
30
Fresnel lens
1
2
50
30
meta lens

FIG. 6

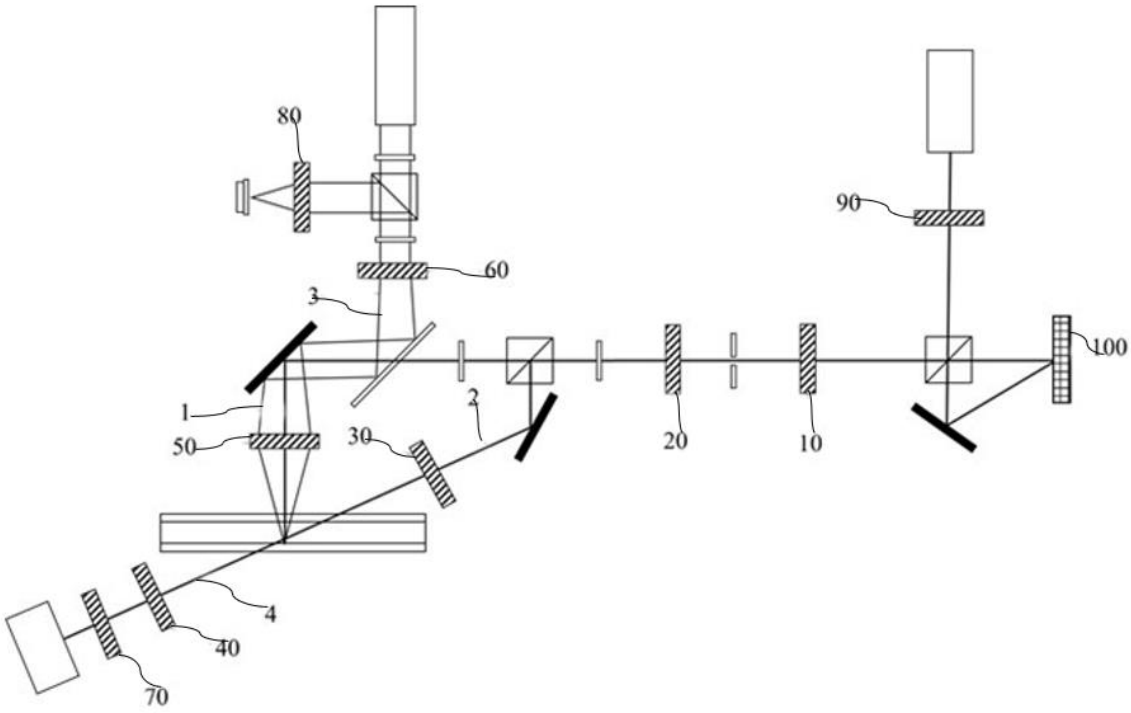


FIG. 7

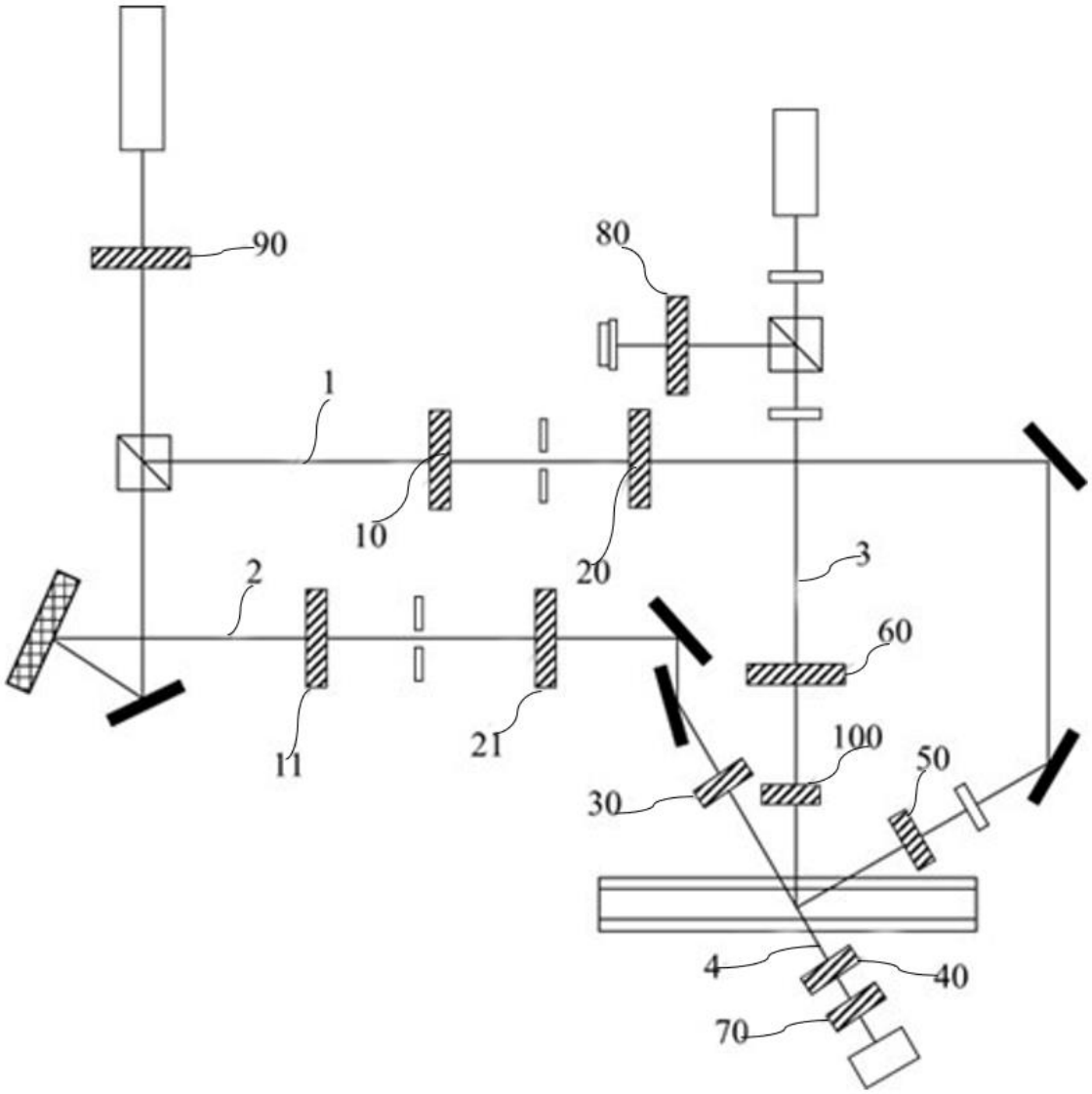


FIG. 8

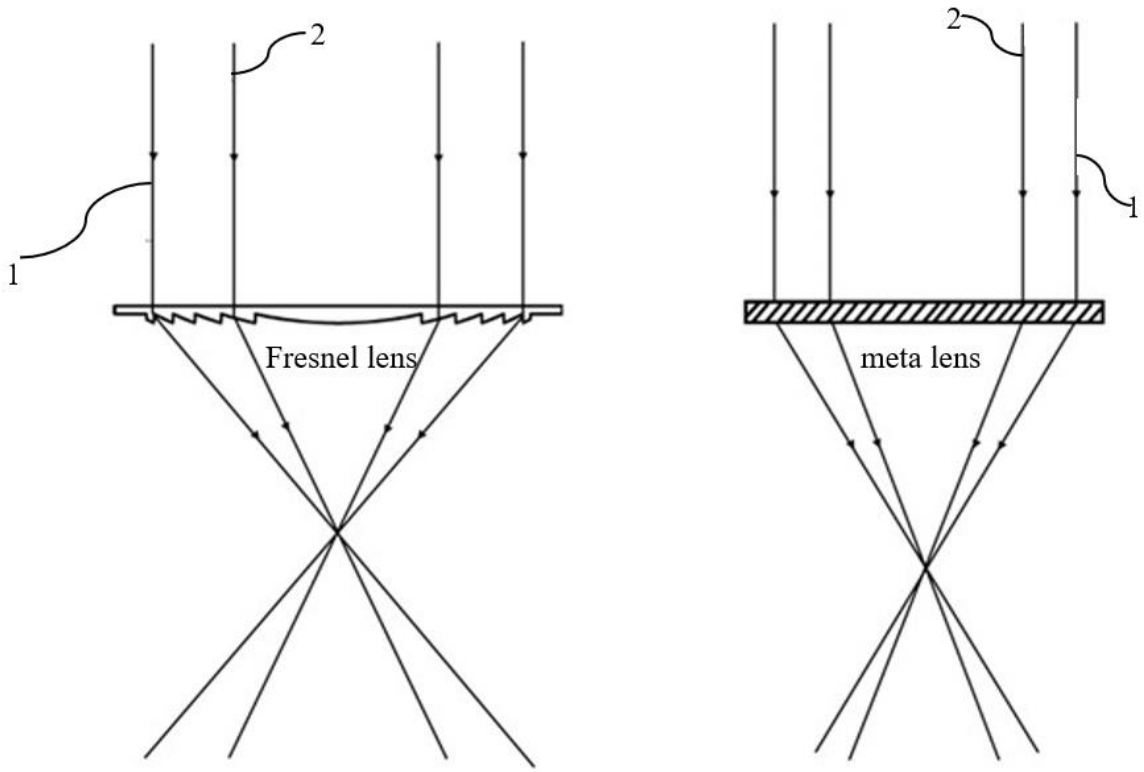


FIG. 9

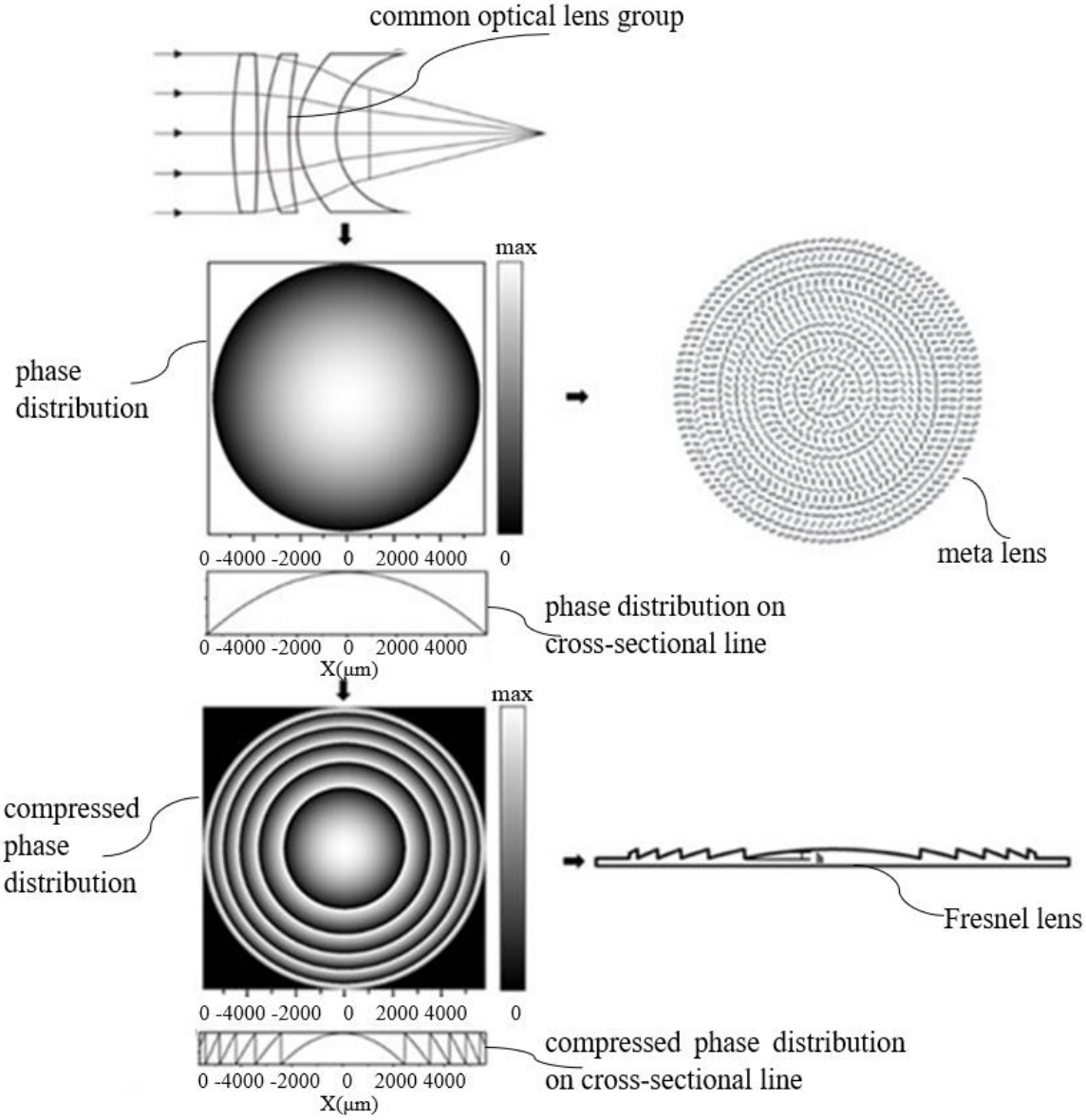

common optical lens group
max
phase
distribution
0 -4000 -2000 0 2000 4000
0
meta lens
phase distribution on
cross-sectional line
0 -4000 -2000 0 2000 4000
X(μm)
max
compressed
phase
distribution
0 -4000 -2000 0 2000 4000
0
Fresnel lens
compressed phase distribution
on cross-sectional line
0 -4000 -2000 0 2000 4000
X(μm)

FIG. 10

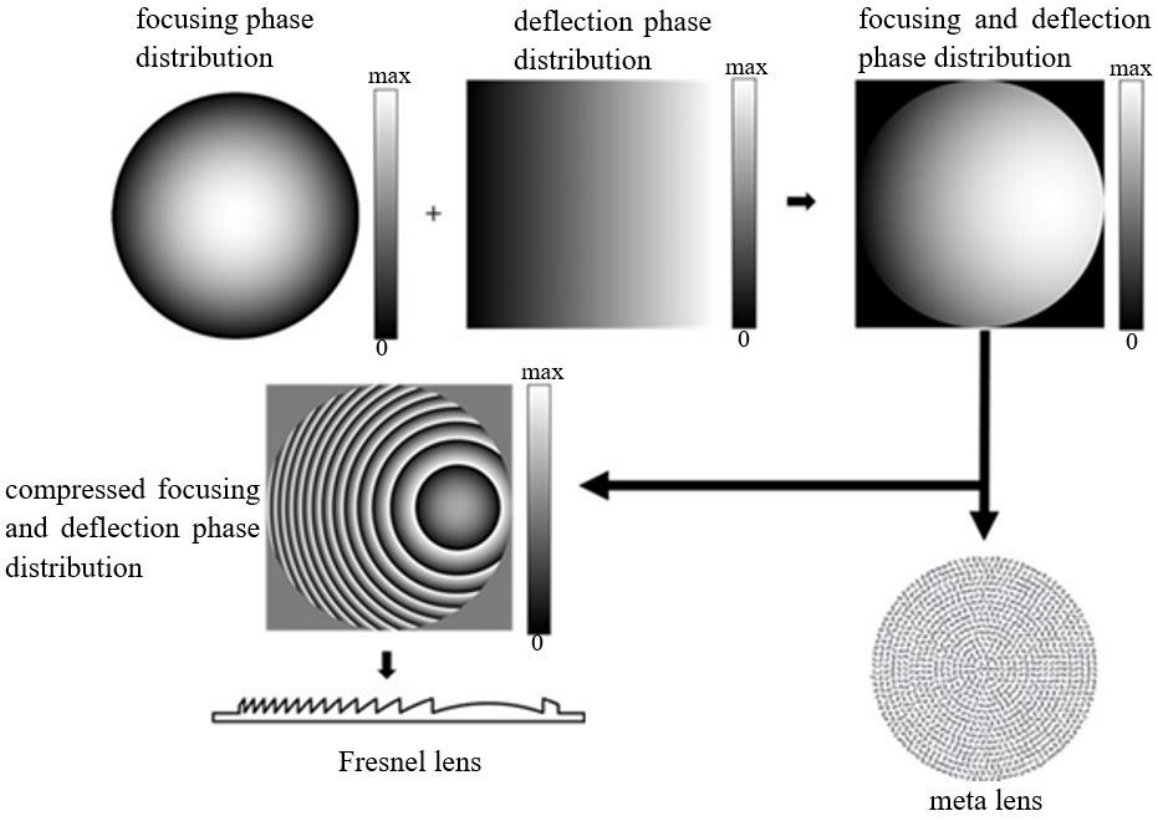

focusing phase distribution
max
0
+
deflection phase distribution
max
0
focusing and deflection phase distribution
max
0
max
0
compressed focusing and deflection phase distribution
Fresnel lens
meta lens

FIG. 11