

Title (en)
INTEGRATED BEAMFORMER AND METHODS OF MANUFACTURE THEREOF

Title (de)
INTEGRIERTER STRAHLFORMER UND ENTSPRECHENDES HERSTELLUNGSVERFAHREN

Title (fr)
FORMEUR DE FAISCEAUX INTEGRE ET PROCEDES DE FABRICATION CORRESPONDANT

Publication
EP 0934488 A4 19991208 (EN)

Application
EP 97911943 A 19971020

Priority
• US 9719500 W 19971020
• US 73394096 A 19961021

Abstract (en)
[origin: WO9817943A1] A solid integrated beamformer includes a solid nonimaging optic (40) having (i) a proximal nonimaging end and (ii) a distal nonimaging end; a solid refractive optic (50) integrally attached to the distal nonimaging end, the solid refractive optic including a distal refractive end; and a holographic surface diffuser (60) integrally formed on the distal refractive end. The solid integrated beamformer providing advantages in the precise light distribution is obtained with a compact and relatively inexpensive unitary optical device.

IPC 1-7
F21V 7/04; **F21V 8/00**; **G02B 5/32**; **G03H 1/00**

IPC 8 full level
F21V 8/00 (2006.01); **G02B 5/02** (2006.01); **G02B 5/32** (2006.01); **G02B 6/122** (2006.01); **G02B 6/24** (2006.01); **G02B 6/32** (2006.01); **G02B 19/00** (2006.01); **G02B 27/09** (2006.01); **G02B 6/00** (2006.01)

CPC (source: EP)
G02B 5/0252 (2013.01); **G02B 5/0268** (2013.01); **G02B 6/1221** (2013.01); **G02B 6/241** (2013.01); **G02B 6/32** (2013.01); **G02B 19/0028** (2013.01); **G02B 19/0047** (2013.01); **G02B 6/0001** (2013.01)

Citation (search report)
• [A] DE 2240780 A1 19740228 - STANDARD ELEKTRIK LORENZ AG
• [A] WO 9425795 A1 19941110 - SILEC LIAISONS ELEC [FR]
• [DA] US 5365354 A 19941115 - JANNSON TOMASZ P [US], et al
• See references of WO 9817943A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 9817943 A1 19980430; EP 0934488 A1 19990811; EP 0934488 A4 19991208; JP 2001503158 A 20010306

DOCDB simple family (application)
US 9719500 W 19971020; EP 97911943 A 19971020; JP 51971398 A 19971020