Title (en)
METHOD FOR RECONSTRUCTING A SURFACE USING A LINEAR PREDICTION AND APPLICATIONS OF SAID METHOD

Title (de)
VERFAHREN ZUR WIEDERHERSTELLUNG EINER FLÄCHE MITTELS LINEARER PRÄDIKTION UND ANWENDUNGEN DES VERFAHRENS

Title (fr)
PROCEDE POUR RECONSTRUIRE UNE SURFACE AVEC MISE EN OEUVRE D'UNE PREDICTION LINEAIRE ET APPLICATIONS DE CE PROCEDE

Publication
EP 1078321 A1 20010228 (FR)

Application
EP 99918032 A 19990507

Priority
- FR 9901095 W 19990507
- FR 9805784 A 19980507

Abstract (en)
[origin: FR2778474A1] The invention concerns a method for reconstructing a surface (Y) by a set of measurements on sites (S), using a linear prediction in points (X) located outside said sites (S). The method consists in using measurements of geometric variables [Y(S), Y'(S)] associated with said surface (Y), and provides an optimal estimate of the characteristics of said geometric variables [Y(S), Y'(S)]. The measured variables can be either altitudes (Y(S)), or slopes (Y'(S)). In the latter case, a major application is the optimisation of the control of deformable mirrors whereof the control loop comprises a Shack-Hartmann sensor. Said reconstruction method can be applied with technologies for measuring a wave front slopes, such as the Shack-Hartmann method, differential interferometry or the moiré fringe method.

IPC 1-7
G06F 17/17

IPC 8 full level
G01J 9/00 (2006.01); **G06T 17/30** (2006.01)

CPC (source: EP)
G01J 9/00 (2013.01); **G06T 17/30** (2013.01)

Citation (search report)
See references of WO 9957650A1

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)
FR 2778474 A1 19991112; **FR 2778474 B1 20000804**; AU 3610199 A 19991123; EP 1078321 A1 20010228; WO 9957650 A1 19991111

DOCDB simple family (application)
FR 9805784 A 19980507; AU 3610199 A 19990507; EP 99918032 A 19990507; FR 9901095 W 19990507