Title (en)

METHOD FOR PROVIDING A DETECTION SIGNAL FOR OBJECTS TO BE DETECTED

Title (de)

VERFAHREN ZUR BEREITSTELLUNG EINES DETEKTIONSSIGNALS FÜR ZU DETEKTIERENDE OBJEKTE

Title (fr)

PROCÉDÉ POUR FOURNIR UN SIGNAL DE DÉTECTION POUR DES OBJETS À DÉTECTER

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Application

EP 18749341 A 20180730

Priority

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Abstract (en)

[origin: WO2019030041A1] The invention relates to a method for providing a detection signal for objects (70) to be detected, wherein by means of a first optical non-linear 3-wave process (30, 30a), from a light beam of a light source (10) having an output frequency (flaser), at least one first and one second light beam are generated, which have different frequencies (fobj, fref) and wherein the first light beam having a reference frequency (fref) is detected and wherein the second light beam having an object frequency (fobj) is emitted and, after reflection on an object (70), is received, and wherein the light beam having the output frequency (flaser) and the second light beam having the object frequency (fobj) are superimposed, and wherein by means of a second optical non-linear 3-wave process (30, 30b), from the two superimposed light beams having the output frequency (flaser) and having the object frequency (fobj), a reference beam having a reference frequency (fref) is generated, and wherein a detection signal is generated such that, based on the time difference between the detection of the first light beam having the reference frequency (fref) and a detection of a change in the reference beam having reference frequency (ref) on the basis of said superimposition, the distance (d) of the object (70) can be determined.

IPC 8 full level

G01S 17/10 (2020.01); **G01S 7/481** (2006.01); **G01S 7/4861** (2020.01); **G01S 7/4865** (2020.01); **G01S 7/487** (2006.01); **G01S 17/26** (2020.01)

CPC (source: EP KR US)

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