ASSET LIST

LOT 115: SYSTEMS AND METHODS INVOLVING NURBS FOR SURFACE FITTING PATENTS FOR SALE

115号专利包：曲面拟合非均匀有理B样条的系统和方法专利待拍

Ocean Tomo Bid-Ask™ Market patent auction lot 115 consists of one U.S. patent and one European patent. The patented technology offers a superior NURBS (Non-Uniform Rational B-Splines) through – point method that mitigates wrinkle creation in CAD / CAE modeling of curves and surface. It applies to model-based definition of highly accurate surface representation. The portfolio offers systems and methods that reduce various undesirable anomalies (e.g. wrinkles) in curves and surfaces associated with both open and periodic (close-loop) shapes modeling. This patent portfolio is a critical link to model based digital thread that allows simplification and improvements in accuracy and quality of product design, and increases the efficiency of manufacturing a product. Harnessing model based digital thread relies on seamlessly bridging geometric digital models with surfaces derived from captured images. This technology is beneficial to manufacturers and allows for transformation and analysis of the data throughout the product design process, as well as for comparing aftermarket parts to their original design (comparing wear and tear). NURBS is a well-established and highly efficient technique for creating free-form curves and surfaces in computer-aided design (CAD). In this regard, numerous CAD methodologies are available that use NURBS for fitting curves through all given data points. Unlike other applications, when such methodologies are used on data points with sharp curvature changes, undesirable anomalies frequently occur and can cause downstream manufacturing software malfunction. This patented technology decreases the chances of abnormalities by determining curvature estimates associated with the data points prior to performing surface fitting with respect to the data points. This technology can avoid expensive and labor intensive manual re-work in CAD, and enhance the manufacturing process to reduce stress and breakage at the locations of curvature shock. It also has application in aftermarket comparison of finished part to original design. This portfolio applies to any manufacturing or service company on the journey to embracing "industry 4.0" or any software provider selling CAD software.

This portfolio includes source code in Matlab, Fortran, Java and Python.
This portfolio also includes technical support not to exceed 10 hours.
The seller will not sell to non-practicing entities (NPE).

Ocean Tomo Bid–Ask™市场115号专利包包含一个美国专利和一个欧洲专利。该专利技术提供了卓越的NURBS（非均匀有理B样条），减轻了在CAD/CAE曲线和曲面建模中产生皱纹的情况。它适用于基于模型的高精度曲面。该专利包提供的系统和方法可以在与开放和周期性形状建模相关的曲线和曲面中减少不良异常（例如皱纹）。该专利包是基于模型的数字线程的关键链接。它可以简化和改进产品设计的准确性和质量，并提高产品制造效率。这项技术能帮助制造商在整个产品设计过程中对数据进行转换和分析，以及将售后零件与原始设计进行比较。NURBS是一种公认的高效技术，可用于在计算机辅助设计（CAD）中创建自由形式的曲线和曲面。在这方面，有许多CAD方法可以使用NURBS拟合所有给定数据点的曲线。与其他应用程序不同，将此类方法用于曲率急剧变化的数据点时，经常会发生异常现象，并可能导致下游制造软件故障。这项专利技术通过在对数据点进行曲面拟合之前确定与数据点相关的曲率估算值，从而减少了发生异常的机会。这项技术可以避免在CAD中进行昂贵且费力的人工返工，并且可以增强制造过程以减少曲率冲击部位的应力和断裂。它也可用于将零件与原始设计进行售后比较。该专利包适用于对"工业4.0"敞开怀抱的任何制造或服务公司，或销售CAD软件的任何软件提供商。
待售的专利包括Matlab、Fortran、Java、Python的源代码。

卖家还会提供不超过10小时的专家技术支持。
该专利包不出售给非执业实体（NPE）。

For further information or to bid on this lot, please email Bid-Ask@OceanTomo.com.
竞拍该专利包或详询更多信息，欢迎联系 Bid–Ask@OceanTomo.com.

NO. 序号	PUBLICATION NO. 公开号	PATENT TITLE 专利名称	PRIMARY IP CLASS IPC主分类号	PRIORITY DATE 优先权日	FILE DATE 申请日	ISSUE/ PUBLICATION DATE 公开日	NO. OF FORWARD CITATIONS 前引数量
1	US9336628B2	Systems and methods involving surface fitting 曲面拟合的系统和方法	G06T 17/00	5/8/08	5/8/08	5/10/16	2
2	EP2116976A3	Method and apparatus for modeling a physical surface using surface fitting 使用曲面拟合对物理表面建模的方法和设备	G06T 17/3	5/8/08	5/8/09	12/25/19	0