

Embodiments of the invention seek to provide~~is then based on the object of providing~~ a material-saving substrate support with which the disadvantages of the prior art can be avoided.

According to an aspect, there is provided a substrate support for holding substrates or wafers to be processed and for transporting them in or through process plants with a frame consisting of longitudinal and transverse supports and a plurality of longitudinal and transverse members within the frame, which are arranged and interconnected to intersect one another in the manner of a grid inside such that a base grid for directly or indirectly holding substrates is formed, wherein the longitudinal and transverse supports and also the longitudinal and transverse members are connected to one another in a form-fitting manner by way of mortise and tenon joints and/or cross-lapped joints, wherein the tenons have at least non-round or angular outer contours and the mortise holes have shape-congruent inner contours, and wherein the outer longitudinal supports are in each case composed of an upper chord and a lower chord, which are connected to each other fixedly but releasably.

Embodiments of~~The object on which the invention is based is achieved by arranging and interconnecting~~ a multiplicity of longitudinal and transverse members to intersect one another in the manner of a grid inside a frame formed from longitudinal and transverse supports, in a manner such that a base grid for directly or indirectly holding substrates is formed.

A substrate support of such configuration is distinguished by a particularly low-mass construction and is assemblable completely individually and adaptable to any desired conditions of use. Thus, the substrate support according to embodiments of the invention can be used with little outlay to transport any desired substrates through process plants, since a corresponding adaptation is possible simply using special adapters.

In ~~an embodiment~~~~a first configuration~~ of the invention, the longitudinal and transverse supports and also the longitudinal and transverse members are connected to one another in a form-fitting manner. In this manner, a high dimensional stability is achieved and in addition simple assembly and disassembly of the substrate support are ensured.

The form-fitting connections between the longitudinal and transverse supports and also the longitudinal and transverse members can be realized simply by way of mortise and tenon joints and/or cross-lapped joints, wherein the tenons have non-round or angular outer contours and the mortise holes have shape-congruent inner contours.

In a further embodiment~~development~~ of the invention, the outer longitudinal supports are in each case composed of an upper chord and a lower chord, which are connected to each other fixedly but releasably, which can be realized particularly easily by using a screw-connection.

Furthermore, the transverse members are fixed in a form-fitting manner to the longitudinal supports between the upper chord and the lower chord, with a form-fitting attachment using mortise and tenon joints being provided herefor.

In a further embodiment~~configuration~~ of the invention, the longitudinal and transverse members are provided with unipartite or multipartite holding devices for the placement and fixing of substrates. Such holding devices can be configured entirely as desired depending on the dimensions and the shape of the substrates.

In the interest of simple fixability of the holding devices, they are fixed on the longitudinal and transverse members using pins, clips or screws.

The holding devices can furthermore be attached on the substrate support using pinned-on or screw-connected decoupling pieces made of ceramics, graphite or metal in order to bring about thermal and/or electrical decoupling of the holding devices from the substrate support.

In a further embodiment~~development~~ of the invention, the individual parts of the substrate support are provided with PyC (pyrolytic carbon), SiC-CVD coatings or with plasma-sprayed ceramic coatings and/or are, depending on the field of use, composed of CFC, CFRP, ISO-graphite (synthetic graphite) or