be bonded better on a product substrate or a further component. In particular, the contamination-free provision of the individual components, in particular of the treated surfaces of the components, is of particular importance in this regard. In particular, the interface, which has specific properties in order to guarantee the functionality of the component, is located or arises between the component and the product substrate.

Devices and processes are described in the prior art, in which the component surfaces can be processed or cleaned by oxygen compounds and/or nitrogen compounds. The processing and cleaning of the component surfaces partially take place in each case in a device which can operate under a vacuum. However, the components are then removed again out of this device and thus exposed to the atmosphere. The freshly cleaned and activated component surfaces of the individual components are thus contaminated. The components are then bonded onto a product substrate in another device. Along this path, the component surfaces can again become contaminated. The number of defective components and the cost of processing is increased by the contamination.

Embodiments of the present invention disclose a method and a device for producing and preparing components, which at least partially, in particular completely, remove the drawbacks listed in the prior art. In particular, embodiments of the invention disclose an improved method and an improved device for producing and preparing components. In particular, embodiments of the present invention disclose a method and a device for producing and preparing components, which reduce the rejection rate of the components. Furthermore, embodiments of the present invention disclose a method and a device for producing and

preparing components which can be carried out particularly reliably and free from contamination or which operates particularly reliably and free from contamination. Furthermore, it is a problem of the present invention to specify a method and a device for producing and preparing components, with which the treated surfaces, in particular the interfaces of the components provided for bonding, can be protected.

The present problem is solved but the features of the coordinated claims. Advantageous developments of the invention are indicated in the sub-claims. Any combinations of at least two of the features stated in the description, in the claims and/or the drawings also fall within the scope of the invention. Values lying within the stated limits are also deemed to be disclosed as limiting values in the stated value ranges and can be claimed in any combination.

A first aspect of the invention relates to a method for producing and preparing electronic components with at least the following steps in the following sequence:

i) preparation of a first substrate with a first substrate surface and a second substrate surface,

ii) carrying out a surface treatment on the first substrate surface, and then

iii) application of a protective layer on the treated first substrate surface,

iv) separation of the substrate into components.

Furthermore, a second aspect of the invention relates to a device for producing electronic componts, at least comprising surface treatment means for the surface treatment of a first substrate surface of a first substrate, means for applying a protective layer on the first substrate surface and separation means for separating the first substrate into components, wherein the device is constituted such that the first substrate surface can first be treated by the surface treatment means and then the protective layer can be applied on the treated first substrate surface.

The protective layer does not necessarily have to be a polymer protective layer. The protective layer can be a polymer, an oxide, a nitride, a metal, a metal alloy, etc. The protective layer can thus be electric or dielectric and therefore have a covalent, metallic or ionic bonding character. The protective layer is constituted such that it can subsequently be removed again, can preferably be completely removed. The removal of an oxide protective layer can be carried out for example with the aid of an ion cannon.

In the application for the invention, a protective layer on a polymer base is described by way of example. The use of a polymer as a protective layer is also particularly preferred.

By means of the method and the device, the surface treatments or the treated surfaces can advantageously be protected. The protective layer thus preserves the treated surfaces against contamination, in particular against contamination with particles which arise when the substrate is separated into components, and also against the atmosphere. The treated surface is thus