

## Title (en)

METHOD FOR HANDLING THINNED CHIPS FOR INTRODUCING THEM INTO CHIP CARDS

## Title (de)

VERFAHREN ZUM HANDHABEN VON GEDÜNNTEN CHIPS ZUM EINBRINGEN IN CHIPKARTEN

## Title (fr)

PROCEDE DE MANIPULATION DE PUCES AMINCIES POUR LE DEPOT DESDITES PUCES SUR DES CARTES A PUCE

## Publication

**EP 1183726 A1 20020306 (DE)**

## Application

**EP 00927133 A 20000504**

## Priority

- DE 19921230 A 19990507
- EP 0003988 W 20000504

## Abstract (en)

[origin: DE19921230A1] The invention relates to a method for handling thinned chips for introducing them into chip cards. According to the inventive method, first a wafer is bonded with its front face onto a carrier substrate by means of an adhesive layer. Then the wafer is thinned from its back and is subdivided into single chips by sawing into the wafer from the back up to the adhesive layer. The adhesive layer is dissolved and the individual chips are removed from the carrier substrate by means of a suction head and are deposited in a special storage container until further treatment. Alternatively, the chips sawed out from the wafer are provided on their backs with a continuous support film by means of a second adhesive layer and the first adhesive layer is dissolved by means of a method that does not attack the second adhesive layer. The chips that are linked via the support film can be jointly removed from the carrier substrate and can be removed from the support film one by one once the second adhesive layer is removed. The wafer can alternatively be provided with a continuous support film by means of a second adhesive layer before it is sawed from the back. In this case, too, the first adhesive layer is dissolved while the second adhesive layer is conserved and the individual chips that are reinforced by the support film are removed from the carrier substrate.

## IPC 1-7

**H01L 21/78**; **H01L 21/52**

## IPC 8 full level

**H01L 21/304** (2006.01); **H01L 21/301** (2006.01); **H01L 21/58** (2006.01); **H01L 21/68** (2006.01); **H01L 21/78** (2006.01); **H01L 23/498** (2006.01)

## CPC (source: EP)

**H01L 21/6836** (2013.01); **H01L 21/78** (2013.01); **H01L 23/49855** (2013.01); **H01L 24/27** (2013.01); **H01L 24/29** (2013.01); **H01L 24/32** (2013.01); **H01L 24/75** (2013.01); **H01L 24/83** (2013.01); **H01L 2221/68327** (2013.01); **H01L 2223/5448** (2013.01); **H01L 2224/2612** (2013.01); **H01L 2224/274** (2013.01); **H01L 2224/83191** (2013.01); **H01L 2224/8385** (2013.01); **H01L 2924/01004** (2013.01); **H01L 2924/01005** (2013.01); **H01L 2924/01013** (2013.01); **H01L 2924/0102** (2013.01); **H01L 2924/01029** (2013.01); **H01L 2924/01047** (2013.01); **H01L 2924/01082** (2013.01); **H01L 2924/07802** (2013.01); **H01L 2924/07811** (2013.01); **H01L 2924/14** (2013.01); **H01L 2924/19042** (2013.01); **H01L 2924/3011** (2013.01)

## Citation (search report)

See references of WO 0068990A1

## Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**DE 19921230 A1 20001109**; **DE 19921230 B4 20090402**; AU 4561200 A 20001121; CN 1157779 C 20040714; CN 1350701 A 20020522; EP 1183726 A1 20020306; JP 2002544669 A 20021224; WO 0068990 A1 20001116

## DOCDB simple family (application)

**DE 19921230 A 19990507**; AU 4561200 A 20000504; CN 00807283 A 20000504; EP 0003988 W 20000504; EP 00927133 A 20000504; JP 2000617491 A 20000504