

## 1. Basis:

Your Office issued Patent Rejection No. 04305, 10420399900, dated March 27, 2015. The applicant has submitted a reexamination statement within the statutory period. Your Office is kindly requested to consider the reexamination grounds and make a decision.

## 2. Reasons for applying for reexamination:

### First independent claim (claim 1)

Regarding the Examining Committee's comparison of the material layer described in "Paragraph 1" on page 3 of the Refusal Decision (from the second to last line on page 8 to the sixth line on page 9) of Reference 2 to the epitaxial layer of this application, the applicant argues that the material layer typically used to form sidewalls is a dielectric material composed of silicon oxide or silicon nitride, not an epitaxial layer. Furthermore, Reference 2 never mentions that the material layer is composed of an epitaxial layer, so directly comparing the material layer in the cited paragraph to the epitaxial layer of this application is inappropriate. In the absence of an epitaxial layer, the applicant believes that the cited application fails to reasonably demonstrate the sequential nature of the epitaxial layer followed by a single lithography and etching step to divide the gate structure.

Secondly, the material layer used to form the sidewalls in Reference 2 was clearly formed over the gate pattern 104 after a second photolithography and etching process had been performed on the gate pattern (in this case, the gate pattern was not 104). Therefore, if the examiner compares the material layer used to form the sidewalls in Reference 2 with the epitaxial layer in this case, Reference 2 should have been formed by performing a second photolithography and etching process on the gate pattern (not shown in the diagram in Reference 2) before the epitaxial layer (material layer) was formed, rather than performing a second photolithography and etching process on the gate pattern after the epitaxial layer (material layer) was formed.

Overall, the applicant believes that the combination of Citation 1 and Citation 2 is significantly different from the present case in terms of process sequence and component relationships (for example, the sidewall sub-material in direct Citation 2 versus the epitaxial layer in the present case).

### Second independent claim (claim 11)

Regarding the review committee's statement in "Paragraph 2" on page 4 of the rejection decision that "... Reference 2, Figure 4, reveals an opening (114) only in each direction, a person with ordinary knowledge in the art can easily use the back-etching opening method of Reference 2 for a direction perpendicular to the opening (114). When this technology is used on the four sidewalls of the gate, the gate is separated after repeated deposition and etching.

"In the process, when sidewall elements are provided on the gate and sidewalls, part of the sidewall elements and part of the gate will be removed simultaneously by etching..." The applicant believes that if, according to the interpretation of the examiner, deposition is repeated on the four sidewalls of the gate, followed by etching and then separation of the gate, then the cited case will indeed have a gate structure similar to the present case in which "two opposing sidewalls of the four sidewalls of the gate have sidewall elements, while the other two opposing sidewalls do not have such sidewall elements."

However, the key point at present is that Reference 2 in Figures 3 and 4 only discloses the formation of sidewall elements 112 on the gate sidewalls, and does not show any process of separating the gate after forming the sidewall elements 112. Therefore, it is impossible for a structure such as the present case where "two of the four gate sidewalls have one sidewall element while the other two do not" to occur.

Since the aforementioned technical features are not explicitly disclosed in the cited cases cited by the Examining Board, claims 1 and 11 in this case should comply with Article 22, Paragraph 2 of the Patent Act. Furthermore, claims 2-10 and 12-14 are dependents of claims 1 and 11. If claims 1 and 11 are patentable, then their corresponding dependents should also be patentable.

In summary, the grounds for your office to reject the patent in this case no longer exist. According to the first paragraph of Article 47 of the Patent Act, "If the invention applied for a patent is found, after examination, to have no grounds for inapplicability, the invention shall be granted a patent." We sincerely request that your office conduct an examination and grant the invention patent as soon as possible. I would be truly grateful for your kindness.

Respectfully submit

Intellectual Property Bureau, Ministry of Economic Affairs

public journal

