See the notice on TED website

Finland-Jyväskylä: Laboratory, optical and precision equipments (excl. glasses)
OJ S 182/2020 18/09/2020
Contract award notice
Supplies

Legal Basis:
Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: University of Jyväskylä
National registration number: 0245894-7
Postal address: Seminaarinkatu 15, Jyväskylän yliopisto
Town: Jyväskylä
NUTS code: FI193 Keski-Suomi
Postal code: 40014
Country: Finland
E-mail: kirjaamo@jyu.fi
Telephone: +358 142601211
Internet address(es):
Main address: http://www.jyu.fi

I.4. Type of the contracting authority

Other type: University

I.5. Main activity

Education

Section II: Object

II.1. Scope of the procurement

II.1.1. Title

Inductively Coupled Plasma Reactive Ion Etch Tool/ICP-RIE System
Reference number: 217/02.03.00.00/2020

II.1.2. Main CPV code

38000000 Laboratory, optical and precision equipments (excl. glasses)

II.1.3. Type of contract

Supplies

II.1.4. Short description

An inductively-coupled-plasma reactive-ion-etcher (ICP-RIE), capable of flexible etching of different materials. Whole system with all required components. Capable of handling wafers up to 200 mm in diameter. There must be a loadlock and (semi)automatic loading of single-wafers and small chips between loadlock and process chamber. The substrate electrode temperature should be controllable between at least -150 °C and 300 °C.
Contracting authority (JYU) may suspend the procurement procedure if the tenders exceed the budget available for the procurement.

Prior references of supplying comparable systems are required.

II.1.6. Information about lots

This contract is divided into lots: no

II.1.7. Total value of the procurement

Value excluding VAT: 380 000,00 EUR

II.2. Description

II.2.3. Place of performance

NUTS code: FI193 Keski-Suomi

Main site or place of performance: University of Jyväskylä, Nanoscience Center/Department of Physics.

II.2.4. Description of the procurement

An inductively-coupled-plasma reactive-ion-etcher (ICP-RIE), capable of flexible etching of different materials. Whole system with all required components. Capable of handling wafers up to 200 mm in diameter. There must be a loadlock and (semi)automatic loading of single-wafers and small chips between loadlock and process chamber. The substrate electrode temperature should be controllable between at least -150 °C and 300 °C.

The main focus of the machine is in etching thin layers (less than 300 nm) of silicon on top of silicon dioxide with high selectivity to silicon dioxide, high anisotropy, smooth sidewalls and no notching. In addition, the machine needs to be able to run the Bosch process when needed. Anisotropic etching of silicon nitride will also be required. Specifically, process specifications must be given for the following processes:

(i) anisotropic etching of silicon photonic crystal structures on SOI: device layer 200-300 nm, PMMA mask, feature sizes down to 20 nm, sidewall verticality and smoothness critical;

(ii) anisotropic etching of 50 nm silicon layers with high (>20:1) selectivity to silicon dioxide. Sidewall verticality and notching control critical;

(iii) anisotropic silicon nitride etching;

(iv) machine needs also to be capable of deep, anisotropic, through the wafer etching of silicon.

We expect that to achieve these we need to be able to do at least following processes:

— cryogenic etching of silicon with SF6 and O2,

— bosch etching of silicon for deep structures (SF6, C4F8), and

— ‘pseudo-bosch’ etching of silicon with the same process gases as Bosch but without the timed pulsing of gases.

II.2.5. Award criteria

Quality criterion - Name: Quality / Weighting: 10

Price - Weighting: 90

II.2.11. Information about options

Options: yes

Description of options:

Option for laser interferometric end point detection.

II.2.13. Information about European Union funds

The procurement is related to a project and/or programme financed by European Union funds: no

II.2.14. Additional information

Section IV: Procedure

IV.1. Description

IV.1.1. Type of procedure
Open procedure

IV.1.3. Information about a framework agreement or a dynamic purchasing system

IV.1.8. Information about the Government Procurement Agreement (GPA)
The procurement is covered by the Government Procurement Agreement: yes

IV.2. Administrative information

IV.2.1. Previous publication concerning this procedure
Notice number in the OJ S: 2020/S 092-219231

IV.2.8. Information about termination of dynamic purchasing system

IV.2.9. Information about termination of call for competition in the form of a prior information notice

Section V: Award of contract

Contract No: 217/02.03.00.00/2020

Title:
Inductively Coupled Plasma Reactive Ion Etch Tool/ICP-RIE System

A contract/lot is awarded: yes

V.2. Award of contract

V.2.1. Date of conclusion of the contract
11/09/2020

V.2.2. Information about tenders
Number of tenders received: 1
Number of tenders received from SMEs: 0
Number of tenders received from tenderers from other EU Member States: 0
Number of tenders received from tenderers from non-EU Member States: 0
Number of tenders received by electronic means: 1
The contract has been awarded to a group of economic operators: no

V.2.3. Name and address of the contractor
Official name: Oxford Instruments Nanotechnology Tools Ltd, trading as Oxford Instruments Plasma Technology
National registration number: GB596117025
Postal address: North End, Yatton
Town: Bristol
NUTS code: UK United Kingdom
Postal code: BS49 4AP
Country: United Kingdom
Telephone: +44 1934837070
The contractor is an SME: no

V.2.4. Information on value of the contract/lot

Total value of the contract/lot: 380 000,00 EUR

V.2.5. Information about subcontracting

Section VI: Complementary information

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: Markkinaoikeus
Postal address: Radanrakentajantie 5
Town: Helsinki
Postal code: 00520
Country: Finland
E-mail: markkinaoikeus@oikeus.fi
Telephone: +358 295643300
Internet address: http://www.oikeus.fi/markkinaoikeus

VI.5. Date of dispatch of this notice

14/09/2020