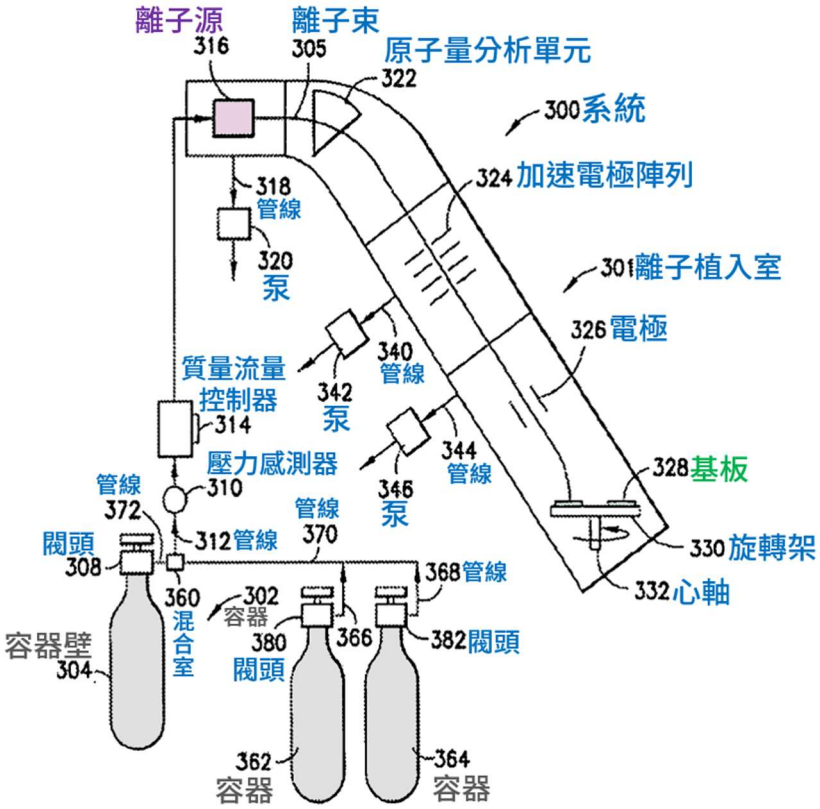
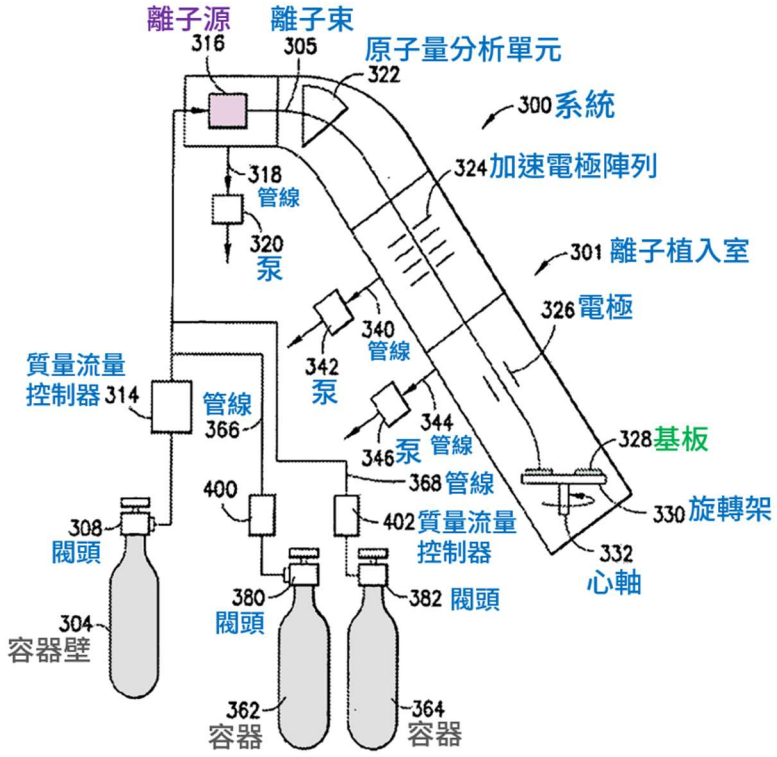
**附圖 1—系爭專利 2 圖式**

1. 系爭專利 2 圖 1 係離子植入處理系統的示意圖




2. 系爭專利 2 圖 2 係另一態樣之離子植入處理系統的示意圖



附圖 2—系爭產品 1 主要圖示




| IEM SAGS II | |
|---|---|
| Gas Boron Trifluoride, enriched ($^{11}BF_3$) | |
| $BF_3$ Purity, % | ≥99.9 |
| Isotopic Enrichment, $^{11}$B at%wt | ≥99.7 |
| Gas Hydrogen ($H_2$) | |
| $H_2$ Purity, % | ≥99.999 |
| Shelf Life | 3 years |

見甲證 12、13，本院卷一第 260、287 頁

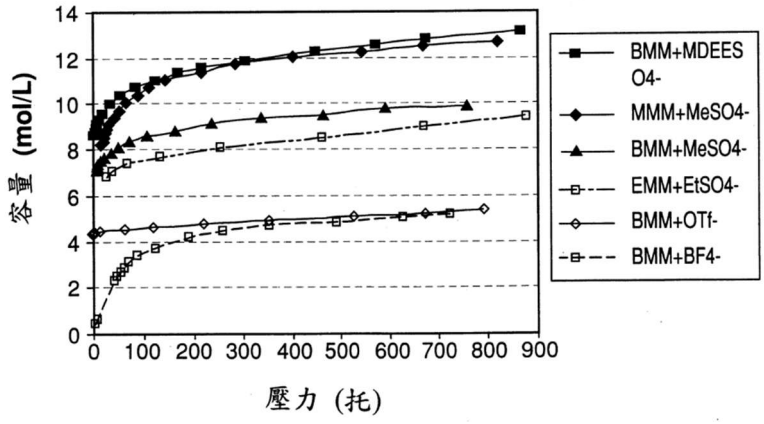
附圖 3—系爭產品 2 主要圖示



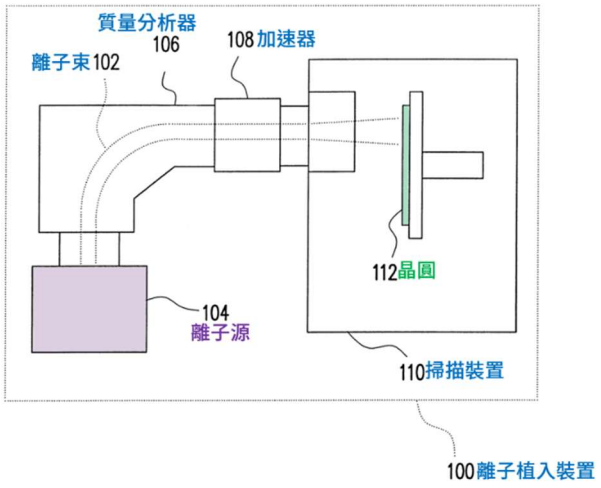

| IEM SAGS II | |
|---|---|
| Gas Germanium Tetrafluoride, enriched ($^{72}GeF_4$) | |
| $GeF_4$ Purity, % | ≥99.9 |
| Isotopic Enrichment, $^{72}$Ge at%wt | ≥55.0 |
| Gas Hydrogen ($H_2$) | |
| $H_2$ Purity, % | ≥99.999 |
| Shelf Life | 3 years |

見甲證 12、13，本院卷一第 261、288 頁

附圖 4—乙證 7 圖 2 各種混合物的三氟化硼(BF3)容量圖




附圖 5—乙證 6 圖 1 之習知離子植入裝置剖面示意圖




附圖 6—乙證 8 之產品外觀及其內含氣體純度分析




**Purity Analysis**

| | |
|---|---|
| **Isotopically Enriched** Germanium Tetrafluoride | Ge-72, 50 – 52%<br>≥ 99.9% |

| **Contaminant** | **Specifications** |
|---|---|
| Argon *(Ar)* | ≤ 25 ppm |
| Carbon Dioxide *($CO_2$)* | ≤ 25 ppm |
| Hydrogen Fluoride *(HF)* | ≤ 25 ppm |
| Nitrogen *($N_2$)* | ≤ 25 ppm |
| Oxygen *($O_2$)* | ≤ 25 ppm |
| Sulfur Dioxide *($SO_2$)* | ≤ 25 ppm |

## 附圖 7—乙證 9 之濃化穩定 Ge 同位素表

**Enriched stable Germanium (Ge) isotopes:**

| Nominal mass | Accurate mass | % Natural abundance | Chemical form | Enrichment available % |
|---|---|---|---|---|
| $^{70}$Ge | 69.9242497 (16) | 20.84 (87) | metal, oxide | 84 - 99 |
| $^{72}$Ge | 71.9220789 (16) | 27.54 (34) | metal, oxide | 82 - 98+ |
| $^{73}$Ge | 72.9234626 (16) | 7.73 (5) | metal, oxide | 72 - 99+ |
| $^{74}$Ge | 73.9211774 (15) | 36.28 (73) | oxide | 94 to 98+ |
| $^{76}$Ge | 75.9214016 (17) | 7.61 (38) | metal, oxide | 85 - 99+ |

## 附圖 8—乙證 10 圖 1、圖 3A 示意圖

圖 1 習知離子植入機系統示意圖

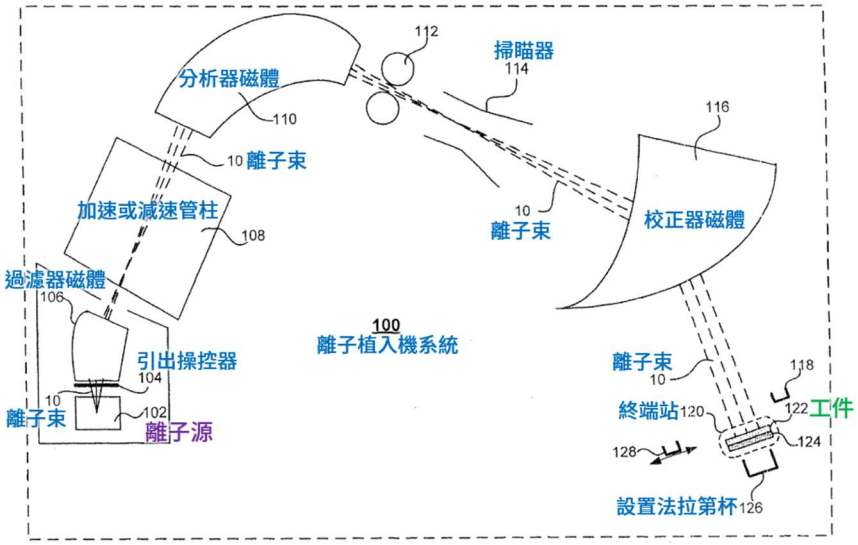
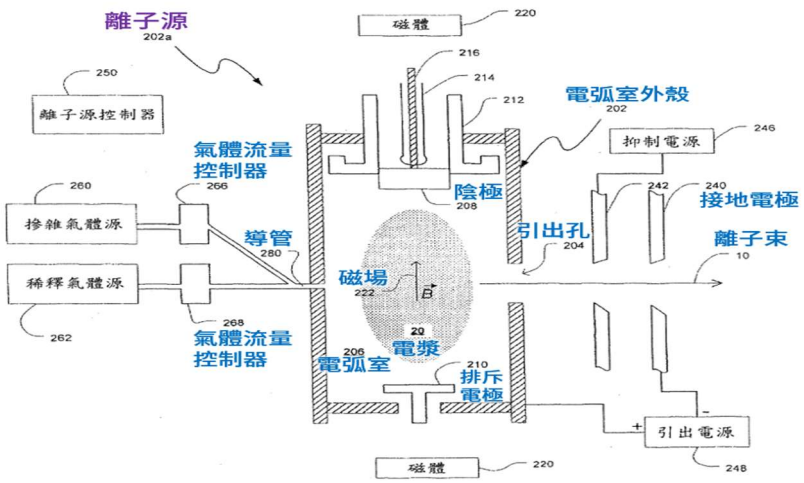
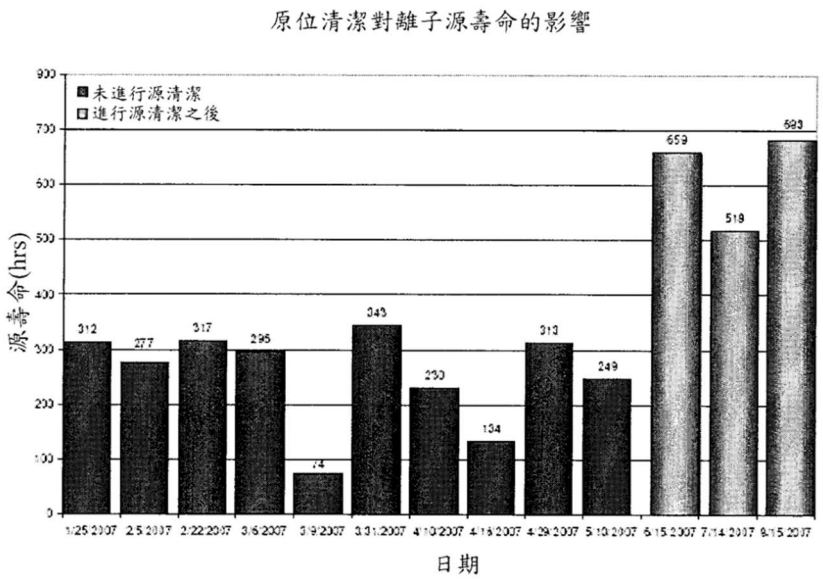


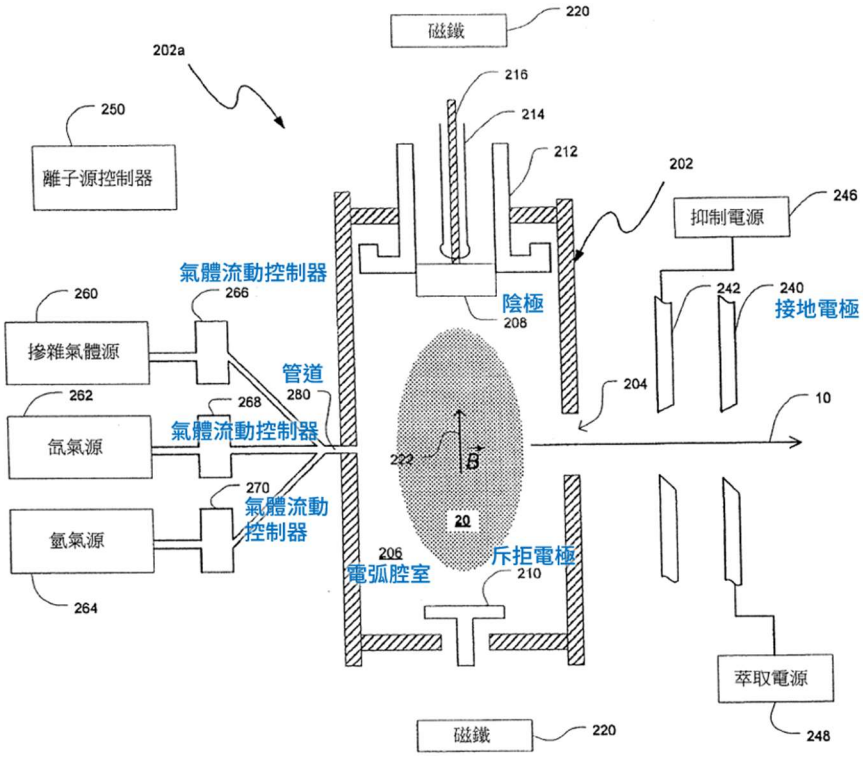

圖 3A 離子源組態之示意圖



## 附圖 9—乙證 13 圖 1 原位清洗處理後對離子源壽命延長示意圖




## 附圖 10—乙證 14 圖 3A 離子源組態示意圖



附圖 11—乙證 15 圖 1 確定植入半導基板雜質總劑量之方法

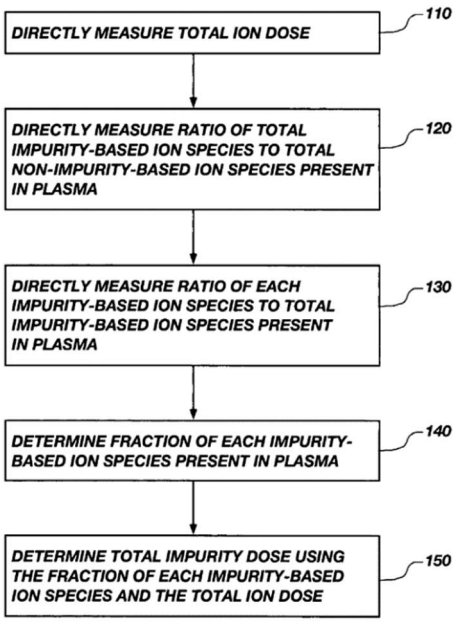



FIG. 1

附圖 12—乙證 16 圖 11 形成半導體裝置之流程步驟

FIG. 11

