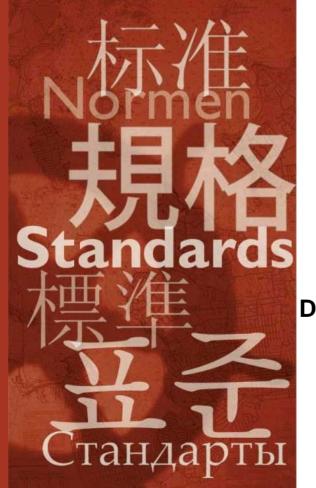
## Boston March 5, 2007 Workshop: Electrostatic Issues in **Semiconductor Manufacturing**



Moderator - Arnold Steinman **Chief Applied Technologist** MKS, Ion Systems Alameda, California USA Leader - SEMI ESD Task Force

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## Agenda

1:30 – 1:40 WELCOME AND INTRODUCTION – A. STEINMAN 1:40 - 2:15A. STEINMAN (MKS, Ion Systems) **Overview of Electrostatic Recommendations in Updated** E78, E129 and the ITRS 2005 2:15 - 3:00T. DANGELMAYER – Dangelmayer and Associates Perfect ESD Storm – CDM and Class 0 Coverge in Backend **Processes** 3:00 - 3:30M. HOGSETT (Novx – MKS, Ion Systems) **Baseline Data Analysis for Particle Attraction** 3:30 - 3:45**QUESTIONS and BREAK** 3:45 – 4:15 T. WELSHER – Dangelmayer and Associates Impact of Technology Evolution on Wafer Level ESD Damage C.W. LONG – IBM Corporation 4:15 – 4:45 **Cleanroom Considerations for ESD Control** M. NORAS (TREK) – Electrostatic Measurement Issues and 4:45 - 5:15 SEMI E43 5:15 - 5:30 ALL - PANEL

## **Thoughts for Today**

- Physics is the same everywhere. We have no static problems in our factory????
- Denial costs a lot of money.
- As devices become smaller in size, faster in operating speed, and more complex, the static problems will become worse.
- The day we hit a technology barrier in semiconductor production due to static charge is coming closer. HDD and FPD production have already hit this barrier.

