Journal Article

Title: Tunable FIR transitions in semiconductor quantum wells

Authors: John, Anne, Kim, Mark, Vera, Deepak, Chen and Bill (eight authors)

Article Story:

Idea for experiment to study interface structure in quantum wells

1. Author: Chen | Actual Date: 01/04/2011

Grant proposal, processing, funds transfer, discussions, etc.

Sample Growth (novel design and growth process)

2. Author: Kim | Actual Date: 02/15/2014

years

Experiment Performed (first ever, difficult, novel experimental setup)

Authors: John, Anne & Deepak | Actual Date: 06/12/2014 3.

Theoretical modeling & explanations of the unusual spectral peaks

Author: Mark & Vera | Actual Date: 09/20/2015 10.

Idea for adjusting / tuning the FIR transitions in InAs/GaSb QW

11. Author: Deepak | Actual Date: 02/26/2016

Article submitted 04/26/2016

Article discloses MULTIPLE IDEAS / DISCOVERIES conceived over 5 years period

Fundamental problem re publishing articles with MULTIPLE ideas:

Idea-1: priority-date: $04/26/2016 \rightarrow LOST 5$ years of priority

Idea-2: priority-date: 04/26/2016 → LOST 2 years of priority

Idea-11: priority-date: 04/26/2016 → LOST 7 months of priority

Priority-Claims allow innovators to secure priority & claim credit for:

"the individual bricks of creation"

Registration / Priority-Claim (1)

Author: Chen | Priority-Date: 01/04/2011

Registration / Priority-Claim (2)

Author: Kim | Priority-Date: 02/15/2014

Registration / Priority-Claim (3)

John, Anne & Deepak | Priority-Date: 06/12/2014

Registration / Priority-Claim (10)

Author: Mark & Vera | Priority-Date: 09/20/2015

Registration / Priority-Claim (11)

Author: Deepak | Priority-Date: 02/26/2016

CONCLUSION:

- Registry is meant to COMPLEMENT & COEXIST with Journals (not to replace publication in journals!!)
- Articles tell a COHERENT & COMPLETE story
- Registry allows innovators to secure / claim credit for individual achievements disclosed in a journal article

5 years