# Berkeley Fung

# $erudite-marker-539: JEMS16. assignee\_disambiguation$

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

### Additional links:

- o Inventor disambiguation golden file: http://fung-storage.coe.berkeley.edu/disambig.golden.list.txt
- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Stat	Value
Last updated	2018-02-15
Rows Size	5,272,283 239.7 MB

### Schema

View in BigQuery

• PatentNo STRING NULLABLE

Patent number

• pdpass STRING NULLABLE

Pdpass (unique identifier of assignees)

• assignee\_disambiguated STRING NULLABLE

Standardized assignee name

### erudite-marker-539:JEMS16.assignee\_raw

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

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- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/
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Stat	Value	
Last updated	2018-02-15	

Stat	Value
Rows	8,579,322
Size	767.6 MB

### Schema

View in BigQuery

• id INTEGER NULLABLE

System generated

• PatentNo STRING NULLABLE

Patent number

• Company STRING NULLABLE

Assignee name (can be companies, universities, government agencies, or simply person name)

• Geography STRING NULLABLE

Raw (city, state, country) tuple of assginee

• Country STRING NULLABLE

Country Code derived from field 'Geography'

• State STRING NULLABLE

State Code derived from field 'Geography' (if in U.S.)

• City STRING NULLABLE

City Name derived from field 'Geography'

• Sequence STRING NULLABLE

Order of appearance (0 means the first assignee, 1 means the second assignee, ..., etc)

# erudite-marker-539:JEMS16.citation

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

Additional links:

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- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Stat	Value
Last updated	2018-02-15
Rows	174,205,746
Size	10.4 GB

### Schema

View in BigQuery

• id INTEGER NULLABLE

System generated

• PatentNo citing STRING NULLABLE

Patent number (citing)

• CountryCodeOrNPL\_cited STRING NULLABLE

U.S. or a foreign country code or NPL (non-patent literature) of the cited art

• PatentNoOrNPL\_cited STRING NULLABLE

Patent number of non-patent literature (cited)

• sequence STRING NULLABLE

Order of appearance (0 means the first cited art, 1 means the second cited art, ..., etc)

# erudite-marker-539:JEMS16.citation\_self

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

Additional links:

- o Inventor disambiguation golden file: http://fung-storage.coe.berkeley.edu/disambig.golden.list.txt
- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Value
2018-02-15 1,667,637 20.1 MB

#### Schema

View in BigQuery

• PatentNo STRING NULLABLE

Patent number

• Self\_Citation\_Flag STRING NULLABLE

Backward prior art cites to the same pdpass

### erudite-marker-539:JEMS16.cpc

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

### Additional links:

- o Inventor disambiguation golden file: http://fung-storage.coe.berkeley.edu/disambig.golden.list.txt
- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/
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Stat	Value
Last updated	2018-02-15
Rows	65,896,459
Size	3.7 GB

### Schema

View in BigQuery

• id INTEGER NULLABLE

System generated

• PatentNo STRING NULLABLE

Patent number

• Type STRING NULLABLE

CPC

• CPC Full STRING NULLABLE

Full CPC

• CPC\_Layer\_1 STRING NULLABLE

CPC top layer 1: before {space}

• CPC\_Layer\_2 STRING NULLABLE

CPC top layer 2: before {slash}

• Sequence STRING NULLABLE

Order of appearance (0 means the first CPC, 1 means the second CPC, ..., etc)

# erudite-marker-539:JEMS16.inventor\_disambiguated\_2

Old table version 2, schema skipped.

# erudite-marker-539:JEMS16.inventor\_disambiguated\_3

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

### Additional links:

- o Inventor disambiguation golden file: http://fung-storage.coe.berkeley.edu/disambig.golden.list.txt
- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/
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same table to inventor disambiguated 2, except for data type differences easier for table joining

Stat	Value
Last updated	2018-02-23
Rows	13,345,776
Size	492.6 MB

### Schema

View in BigQuery

- PatentNo STRING NULLABLE
- InventorFullname STRING NULLABLE
- InventorID STRING NULLABLE

# erudite-marker-539:JEMS16.inventor\_raw

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

Additional links:

- o Inventor disambiguation golden file: http://fung-storage.coe.berkeley.edu/disambig.golden.list.txt
- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Stat	Value
Last updated	2018-02-15
Rows Size	14,745,325 1.2 GB

### Schema

View in BigQuery

• PatentNo STRING NULLABLE

Patent number

• Sequence STRING NULLABLE

Order of appearance (0 means the first inventor, 1 means the second inventor, ..., etc)

• FullName STRING NULLABLE

Full name (in form of Last Name {semicolon} First Name {single space} Middle Name)

• LastName STRING NULLABLE

Last Name

• FirstMiddleName STRING NULLABLE

First Name {single space} Middle Name

• Geography STRING NULLABLE

Raw (city, state, country) tuple of assginee

• Country STRING NULLABLE

Country Code derived from field 'Geography'

• State STRING NULLABLE

State Code derived from field 'Geography' (if in U.S.)

• City STRING NULLABLE

City Code derived from field 'Geography'

# $erudite-marker-539: JEMS16. patent\_metadata\_2$

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

Additional links:

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- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Stat	Value
Last updated	2018-02-15
Rows	6,492,363
Size	5.4 GB

#### Schema

View in BigQuery

• ApplNo STRING NULLABLE

Application number

• ApplDate STRING NULLABLE

Application date

• PatentNo STRING NULLABLE

Patent number

• IssueDate STRING NULLABLE

Patent issue date or grant date

• FamilyID STRING NULLABLE joins on family\_id

Patent Family ID derived from USPTO HTML page of the focal patent

• LawFirm STRING NULLABLE

Agent / Law Firm / Correspondent

• AssistExaminer STRING NULLABLE

Assistant examiner

• PrimaryExaminer STRING NULLABLE

Primary examiner

• Title STRING NULLABLE

Patent title

• Abstract STRING NULLABLE

Patent abstract

• GovernmentInterests STRING NULLABLE

Full text statement acknowledging U.S. government supports (if any)

### Join columns

### **FamilyID**

joins to patents-public-data:patents.publications::family\_id on family\_id (87.45%, 5,677,428 rows)

Key	Percent	Rows	Sample values
all	87.45%	5,677,428	['41164314', '45348360', '46277349', '25524495', '44708394']

```
#standardSQL
SELECT
    COUNT(*) AS cnt,
    COUNT(second.second_column) AS second_cnt,
    ARRAY_AGG(first.FamilyID IGNORE NULLS ORDER BY RAND() LIMIT 5) AS sample_value
FROM `erudite-marker-539.JEMS16.patent_metadata_2`AS first
LEFT JOIN (
    SELECT family_id AS second_column, COUNT(*) AS cnt
    FROM `patents-public-data.patents.publications`
    GROUP BY 1
) AS second ON first.FamilyID = second.second_column
joins from patents-public-data:patents.publications::family_id on family_id (25.67%, 25,206,642 rows)
```

### erudite-marker-539:JEMS16.patent\_novelty

Accompanying materials to

Balsmeier, B., Assaf, M., Chesebro, T., Fierro, G., Johnson, K., Johnson, S., Li, G., W.S. Lueck, O'Reagan, D., Yeh, W., Zang, G., Fleming, L. "Machine learning and natural language processing applied to the patent corpus." Forthcoming at Journal of Economics and Management Strategy.

Additional links:

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- o Inventor social network: http://fung-storage.coe.berkeley.edu/inventors/

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Stat	Value
Last updated	2018-02-15
Rows	2,816,425
Size	90.7 MB

# Schema

View in BigQuery

• PatentNo STRING NULLABLE

Patent number

• Word STRING NULLABLE

New word (unigram)

• CurrentUse STRING NULLABLE

Number of occurrence of the new word in the focal patent

• FutureUse STRING NULLABLE

Number of appearances of the new word in subsequent patents (up until Dec 31, 2014)