package com.twitter.search.common.search;

import java.io.IOException;

import org.apache.lucene.search.DocIdSetIterator;

public class AndNotDocIdSetIterator extends DocIdSetIterator {

private int nextDelDoc;

private final DocIdSetIterator baseIter;

private final DocIdSetIterator notIter;

private int currID;

/\*\* Creates a new AndNotDocIdSetIterator instance. \*/

public AndNotDocIdSetIterator(DocIdSetIterator baseIter, DocIdSetIterator notIter)

throws IOException {

nextDelDoc = notIter.nextDoc();

this.baseIter = baseIter;

this.notIter = notIter;

currID = -1;

}

@Override

public int advance(int target) throws IOException {

currID = baseIter.advance(target);

if (currID == DocIdSetIterator.NO\_MORE\_DOCS) {

return currID;

}

if (nextDelDoc != DocIdSetIterator.NO\_MORE\_DOCS) {

if (currID < nextDelDoc) {

return currID;

} else if (currID == nextDelDoc) {

return nextDoc();

} else {

nextDelDoc = notIter.advance(currID);

if (currID == nextDelDoc) {

return nextDoc();

}

}

}

return currID;

}

@Override

public int docID() {

return currID;

}

@Override

public int nextDoc() throws IOException {

currID = baseIter.nextDoc();

if (nextDelDoc != DocIdSetIterator.NO\_MORE\_DOCS) {

while (currID != DocIdSetIterator.NO\_MORE\_DOCS) {

if (currID < nextDelDoc) {

return currID;

} else {

if (currID == nextDelDoc) {

currID = baseIter.nextDoc();

}

nextDelDoc = notIter.advance(currID);

}

}

}

return currID;

}

@Override

public long cost() {

return baseIter.cost();

}

}