

From: Blumenthal, Uri - 0553 - MITLL <uri@ll.mit.edu> via pqc-forum@list.nist.gov
To: 赵运磊 <ylzhao@fudan.edu.cn>
CC: pqc-forum@list.nist.gov
Subject: Re: [pqc-forum] More clarifications about patents
Date: Wednesday, May 18, 2022 10:38:53 PM ET
Attachments: [smime.p7m](#)

On 5/18/22, 22:05, "'赵运磊' via pqc-forum" <pqc-forum@list.nist.gov> wrote:

> Dear Uri:

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Thank you for publishing it!

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Excellent! Are those implementations Open Source? Freely available?

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> If needed, we can send the implementation codes in a private mail.

That would be very nice, thank you!

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Yes, I understand. There are two concerns here. One is the IPR that you hold - and the following is addressing it. The other one is about alleged patent claims against algorithms like Kyber - and whether those same claims could be alleged against OSKR or CTRU.

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Thank you!

> ——原始邮件——

> 发件人: "Blumenthal, Uri - 0553 - MITLL" <uri@ll.mit.edu>

> 发送时间: 2022-05-19 01:53:21 (星期四)

> 收件人: "赵运磊" <ylzhao@fudan.edu.cn>

> 抄送: "pqc-forum@list.nist.gov" <pqc-forum@list.nist.gov>

> 主题: Re: [pqc-forum] More clarifications about patents

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> Dear Yunlei,

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> Thank you for your proposals - they are very interesting. I have a few questions.

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> 1. Are there reference implementations of CTRU, OSKR, and others? Optimized implementations?

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> 2. Would your proposed algorithms, such as OSKR, still be potential subjects to the same patent claims that, e.g., Kyber is dealing with?

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>

> Please feel free to answer on this mailing list, or privately - as you prefer.

>

> Thank you!

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> V/R,

> Uri

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> All my best

> Yunlei
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> > ——原始邮件——
> > 发件人: "D. J. Bernstein" <djb@cr.yp.to>
> > 发送时间: 2022-05-12 20:55:14 (星期四)
> > 收件人: pqc-forum@list.nist.gov
> > 抄送:
> > 主题: Re: On the possibility of achieving NIST security goals with the
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> > It would be useful to see public assurances as to your company's
> > position regarding usage of "NewHope without reconciliation" and its
> > variants, such as Kyber, SABER, and your latest proposals.
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> > —D. J. Bernstein
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Subject: Re: Re: [pgc-forum] More clarifications about patents
Date: Thursday, May 19, 2022 12:03:11 AM ET

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> Excellent! Are those implementations Open Source? Freely available?

> If so, could you please point me at them? If it isn't Open Source at

> this point - may I suggest considering open-sourcing at least some of them?

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The implementation codes are currently not open source? The reason is that CTRU and OSKR are not related to any standard processes, so we would like not to open source. If NIST or some other standard organization are interested, we can make the implementations codes open.

> > If needed, we can send the implementation codes in a private mail.

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> That would be very nice, thank you!

I will send the implementation in a separate private mail to you.

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Yes, certainly we can make such an official claims about patents as you suggest. It may formally start the work after NIST or other standard organizations show the applicability interest. Indeed, in our KCL proposal in the first round of NIST-PQC, we have already made similar claims. To be frank, we suggest CTRU has another benefit or advantage, as it can be used to improve the state-of-the-art of lattice-based IBE (which is inconvenient to do so based on LWE-based KEMs, besides patent threats to LWE-based KEMS).

Best regards
Yunlei

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> > > 发送时间: 2022-05-12 20:55:14 (星期四)

> > > 收件人: pqc-forum@list.nist.gov

> > > 抄送:

> > > 主题: Re: On the possibility of achieving NIST security goals with the
recent advances of dual attacksRe: Re: [pqc-forum] Improved Dual Lattice Attack

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> > > It would be useful to see public assurances as to your company's

> > > position regarding usage of "NewHope without reconciliation" and its

> > > variants, such as Kyber, SABER, and your latest proposals.

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> > > —D. J. Bernstein

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